

FLORIDA HIGHWAYS

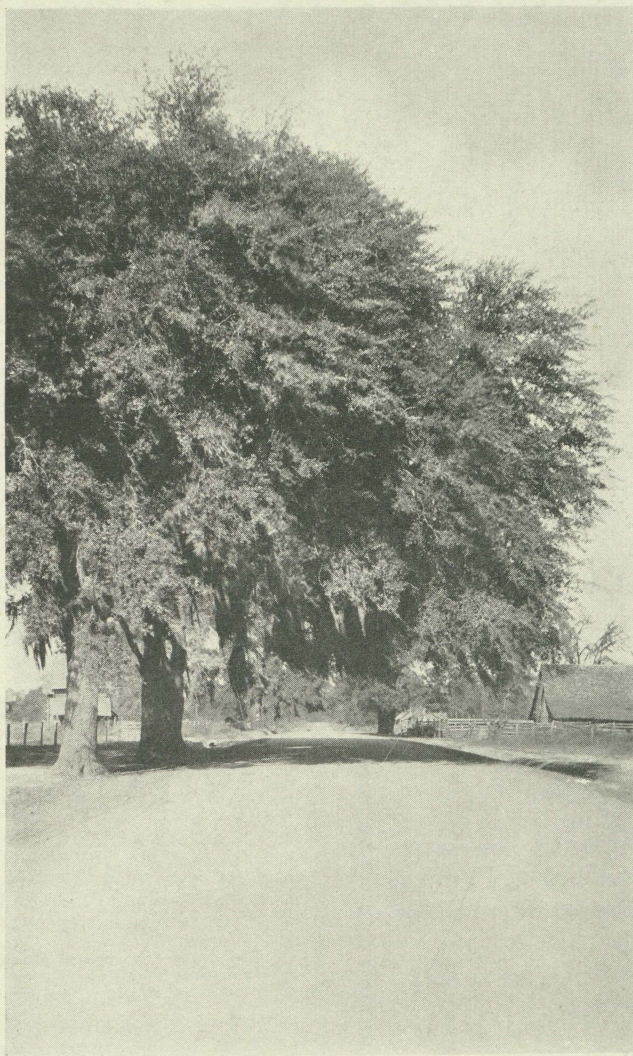
Published by the State Road Department

Vol. V

No. 11

\$1.00 Per Year

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Road 1, Gadsden County, West of Havana.


November
1928

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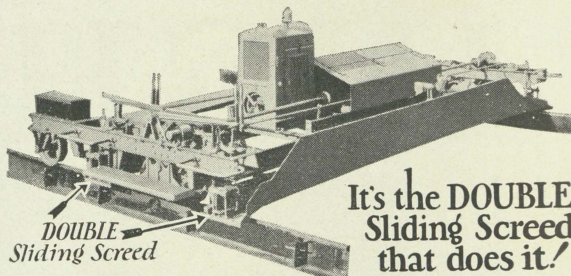
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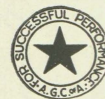
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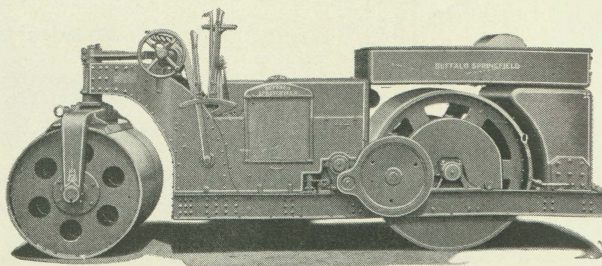
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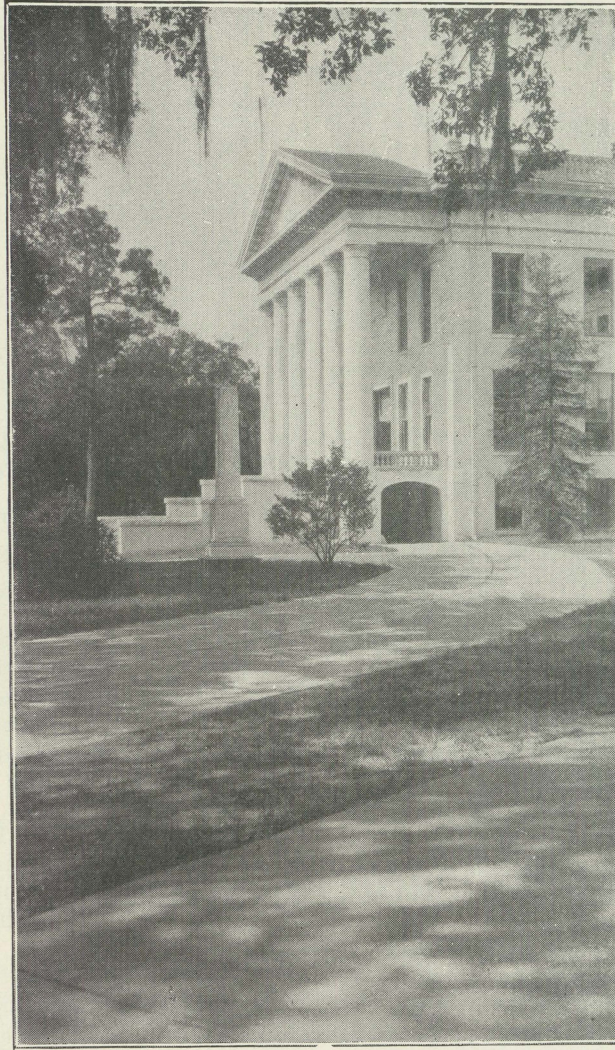
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T-B

FLORIDA

Vol. V
No. 11



HIGHWAYS

NOVEMBER
1928

Transactions at the Quarterly Meeting of the State Road Department of Florida Held at Tallahassee, October 31st, 1928.

THE regular quarterly meeting of the State Road Department of Florida was held in Tallahassee on the 31st day of October, A. D. 1928. The following members were present: F. A. Hathaway, Chairman; E. P. Green, W. J. Hillman, J. Harvey Bayliss and I. E. Schilling. J. L. Cresap, State Highway Engineer, B. A. Meginniss, Attorney for the Department, and W. P. Bevis, Secretary, were also present. The Bureau of Public Roads was represented at the meeting by H. J. Morrison, Federal Highway Engineer.

The minutes of the quarterly meeting held July 25th, 1928, were duly approved.

CONTRACTS AWARDED

Project 672, Road 1, Leon County

Upon motion of Mr. Green, seconded by Mr. Schilling, the following resolution was adopted:

The Department having carefully considered the bids received October 30th, 1928, for the construction of the pavement on the above project, and having found and determined that J. B. McCrary En-

gineering Corporation, Atlanta, Georgia, for a concrete pavement, is the lowest responsible bidder therefor; now, therefore,

BE IT RESOLVED, That the bid of J. B. McCrary Engineering Corporation in the sum of \$189,673.70 be and the same is hereby accepted and the contract therefor be and the same is hereby awarded to said firm.

Project 673, Road 1, Gadsden County

Upon motion of Mr. Green, seconded by Mr. Hillman, the following resolution was unanimously adopted:

The Department having carefully considered the bids received October 30th, 1928, for the construction of the pavement on the above project, and having found and determined that R. G. Lassiter & Company, Jacksonville, Florida, is the lowest responsible bidder therefor for a concrete pavement; now, therefore,

BE IT RESOLVED, That the bid of R. G. Lassiter & Company, in the sum of \$265,916.52, be and the

same is hereby accepted and the contract therefor be and the same is hereby awarded to said firm.

Projects 733 and 734, Roads 33 and 40, Walton County

Mr. W. L. Wade, representing C. G. Kershaw Contracting Company, appeared before the Department and requested permission to withdraw the bids submitted October 30, 1928, by said firm for clearing, grubbing, grading, drainage structures and sand-clay surface on the above projects, because of a clerical error made in the said bids as submitted.

Upon motion of Mr. Green, seconded by Mr. Hillman, permission was granted to withdraw said bids.

Projects 751 and 788, Roads 40 and 10, Walton County

Upon motion of Mr. Schilling, seconded by Mr. Hillman, the following resolution was adopted:

RESOLVED, That the bids of C. C. Hayes submitted October 30th, 1928, on the above projects be rejected on the ground that the same are not responsible bids, the said contractor having stated to this Department that he has not adequate equipment to do the work contemplated on said projects.

Projects 751 and 752, Road 40, Walton County

On motion of Mr. Bayliss, seconded by Mr. Green, the following resolution was unanimously adopted:

The Department having carefully considered the bids received October 30th, 1928, for the clearing, grubbing, grading, drainage structures and sand-clay surface on the above projects, and having found and determined that Walter J. Bryson Paving Company, Jacksonville, Florida, is the lowest responsible bidder therefor; now, therefore,

BE IT RESOLVED, That the bids of Walter J. Bryson Paving Company on said projects, in the respective sums of \$48,854.09 and \$57,306.50, be and the same are hereby accepted and contracts therefor be and the same are hereby awarded to the said firm.

Project 788, Road 10, Walton County

Upon motion of Mr. Bayliss, seconded by Mr. Green, the following resolution was unanimously adopted:

The Department having carefully considered the bids received October 30, 1928, for clearing, grubbing, and grading and necessary drainage structures on the above project, and having found and determined that the bid of Walter J. Bryson Paving Company, Jacksonville, Florida, is the lowest responsible bidder therefor; now, therefore,

BE IT RESOLVED, That the bid of Walter J. Bryson Paving Co., Jacksonville, Florida, in the sum of \$149,340.07, be and the same is hereby accepted and the contract therefor be and the same is hereby awarded to said firm.

Project 734, Road 40, Walton County

Upon motion of Mr. Green, seconded by Mr. Bayliss, the following resolution was unanimously adopted:

The Department having carefully considered the bids received October 30, 1928, for clearing, grubbing, grading, drainage structures and sand-clay surface on the above project, and having found and determined that Penton-Mathis Construction Company, Paxton, Florida, is the lowest responsible bidder therefor; now, therefore,

BE IT RESOLVED, That the bid of Penton-Mathis Construction Co., in the sum of \$63,256.07, be and

the same is hereby accepted and the contract therefor be and the same is hereby awarded to said firm.

Project 735, Road 40, Walton County

Upon motion of Mr. Schilling, seconded by Mr. Green, the following resolution was unanimously adopted:

The Department having carefully considered the bids received October 30, 1928, for clearing, grubbing, grading, drainage structures and sand-clay surface on the above project, and having found and determined that Walter J. Bryson Paving Company, Jacksonville, Florida, is the lowest responsible bidder therefor; now, therefore,

BE IT RESOLVED, That the bid of Walter J. Bryson Paving Co., in the sum of \$118,493.03 be and the same is hereby accepted and that the contract therefor be and the same is hereby awarded to said firm.

Project 733, Road 33, Walton County

Upon motion of Mr. Schilling, seconded by Mr. Green, the following resolution was unanimously adopted:

The Department having carefully considered the bids received October 30, 1928, for clearing, grubbing and grading and necessary drainage structures on the above project, and having found and determined that Walter J. Bryson Paving Company, Jacksonville, Florida, is the lowest responsible bidder therefor; now, therefore,

BE IT RESOLVED, That the bid of Walter J. Bryson Paving Co., in the sum of \$43,066.57, be and the same is hereby accepted and the contract therefor be and the same is hereby awarded to the said firm.

Project 738, Road 42, Jefferson County

On motion of Mr. Schilling, seconded by Mr. Green, the following resolution was unanimously adopted:

The Department having carefully considered the bids received October 30, 1928, for clearing, grubbing, grading and necessary drainage structures on the above project, and having found and determined that R. J. Carroll, Lamont, Florida, is the lowest responsible bidder therefor; now, therefore,

BE IT RESOLVED, That the bid of R. J. Carroll in the sum of \$63,171.62 be and the same is hereby accepted and that the contract therefor be and the same is hereby awarded to said R. J. Carroll.

Project 820, Road 96, Jefferson County

On motion of Mr. Green, seconded by Mr. Bayliss, the following resolution was unanimously adopted:

The Department having carefully considered the bids received October 30, 1928, for clearing, grubbing, grading and necessary drainage structures on the above project, and having found and determined that Curry & Turner, Clearwater, Florida, are the lowest responsible bidders therefor; now, therefore,

BE IT RESOLVED, That the bid of Curry & Turner, in the sum of \$61,700.58 be and the same is hereby accepted, and that the contract therefor be and the same is hereby awarded to the said firm.

Project 821, Road 96, Jefferson County

On motion of Mr. Hillman, seconded by Mr. Green, the following resolution was unanimously adopted:

The Department having carefully considered the bids received October 30, 1928, for clearing, grubbing and grading and necessary drainage structures



Road No. 19, Levy County. Scene in Williston.

on the above project and having found and determined that Bishop Contracting Company, Monticello, Florida, is the lowest responsible bidder therefor; now, therefore,

BE IT RESOLVED, That the bid of Bishop Contracting Co., in the sum of \$36,690.05, be and the same is hereby accepted, and that the contract therefor be and the same is hereby awarded to the said firm.

Project 842, Road 115, Walton County

On motion of Mr. Bayliss, seconded by Mr. Schilling, the following resolution was unanimously adopted:

The Department having carefully considered the bids received October 30, 1928, for clearing, grubbing, grading and necessary drainage structures on the above project, and having found and determined that Walter J. Bryson Paving Company, Jacksonville, Florida, is the lowest responsible bidder therefor; now, therefore,

BE IT RESOLVED, That the bid of Walter J. Bryson Paving Co., in the sum of \$69,628.65, be and the same is hereby accepted, and that the contract therefor be and the same is hereby awarded to said firm.

Citrus County, Road 15

A delegation from Citrus County, consisting of Mr. L. S. Yeomans, Crystal River; Hon. Hugh Hale, Brooksville; Roy Carter, Homosassa Springs, and W. T. Edwards appeared before the Department and stated that the county has available the sum of \$110,000.00 for the construction of the Gulf Coastal Highway (Road 15) between Crystal River and the Hernando county line. This delegation was advised that the Department will construct that portion of the road from Homosassa Springs south to the Hernando County line, if and

when the said funds (\$110,000.00) are made available to the Department.

Hernando County, Road 15

A delegation from Hernando County consisting of Senator Hugh Hale, W. T. Edwards, and L. C. Yeomans, Crystal River, presented to the Department a request that convicts be placed on the stretch of Road 15 in said county from Wekiwachee Springs to the Citrus County line. The Department, through the Chairman, stated that the Department is disposed to act favorably on this request when in a position to do so, which will probably be some time in the year 1929.

The same delegation also requested that the Department take over for maintenance that sector of the same road between Brooksville and Wekiwachee Springs. This request was not granted.

Levy County, Road 13

Mr. A. F. Knotts, Yankeetown, Levy county, stated that the county has funds available for the construction of that part of Road 13 between Otter Creek and Bronson, and asked that the Department advertise for bids for the construction of same. He was informed that the advertisement will be begun when the Department has received the county funds referred to.

Dixie County, Road 19

A delegation from Dixie County, consisting of J. I. Smith, Cross City; Senator B. H. Lindsey, Perry; H. D. Allen, Cross City; M. Fleichel, Cross City; Frank Green, Cross City; Martin Barker, Cross City; Bob Balot, Cross City, and Senator R. H. Weaver, of Perry, requested that contract be let by the Department for the hardsurfacing of State Road 19 between Cross City and the Suwannee river. They were informed by the Department that it is not now in a position to comply with this request; that the



Florida Highways

Published Monthly

Official Publication of the State Road Department

PERSONNEL OF DEPARTMENT

F. A. HATHAWAY (*Jacksonville*), *Chairman*
(*Official Residence, Tallahassee.*)

E. P. GREEN, *Bradenton*

W. J. HILLMAN, *Live Oak*

J. HARVEY BAYLISS, *Pensacola*

I. E. SCHILLING, *Miami*

WALTER P. BEVIS, *Tallahassee, Secretary*

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L. K. Cannon, Tallahassee.....Ass't. State Highway Engineer
G. L. Derrick, Tallahassee.....Bridge Engineer
C. W. DeGinther, Tallahassee.....Ass't. Bridge Engineer
Harvey A. Hall, Gainesville.....Testing Engineer
F. W. Berry, Jr., Tallahassee.....Office Engineer
Paul G. Kennemur, Gainesville, Acting Supt. of Equipment
R. L. Bannerman, Marianna.....Div. Engr.—1st Div.
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Rosa, Wakulla, Walton, Washington.
J. H. Dowling, Lake City.....Div. Engr.—2nd Div.
Counties—Baker, Bradford, Clay, Columbia, Dixie, Duval, Hamil-
ton, Lafayette, Madison, Nassau, Suwannee, Taylor, Union.
R. J. Cassie, Fort Pierce.....Div. Engr.—3rd Div.
Counties—Brevard, Indian River, Martin, Okeechobee, St. Lucie.
L. B. Thrasher, Ocala.....Div. Engr.—4th Div.
Counties—Alachua, Citrus, Lake, Levy, Gilchrist, Marion, Put-
nam, St. Johns, Sumter, Flagler, Volusia.
A. W. Kinney, Lakeland.....Div. Engr.—5th Div.
Counties—Hernando, Hillsborough, Manatee, Orange, Osceola,
Pasco, Pinellas, Polk, Seminole.
R. C. Fergus, Fort Lauderdale.....Div. Engr.—6th Div.
Counties—Broward, Dade, Monroe, Palm Beach.
Henry Wilson, Punta Gorda.....Div. Engr.—7th Div.
Counties—Charlotte, Collier, DeSoto, Glades, Hardee, Hendry,
Highlands, Lee, Sarasota.

Auditing Division

S. L. Walters, Tallahassee.....Auditor

B. A. Meginniss, Attorney for the Department,
Editor and Business Manager.

grade is not yet finished and the Department has no available funds for the purpose, but that it may be possible for the Department to start this work with its own forces around the first of the coming year.

Taylor County

Hon. B. H. Lindsey, Perry, and Hon. R. H. Weaver, Perry, formed a delegation from Taylor County which requested that the Department permit Taylor County to use its equipment and forces on the State roads of Taylor County in lieu of a cash contribution to the cost of constructing same. The request was taken under advisement.

Project 55, Road 14, Alachua County

Major W. R. Thomas, Chairman of the Board of Bond Trustees, and F. J. Hampton, of Hampton & Hampton, county attorneys, of Alachua County, stated that if the Department will let a contract for the construction of Project 55, Road 14, Alachua County, the county will furnish the dirt material and pay to the Department the sum of \$2,500.00 to cover cost of additional haul made necessary by inability to secure necessary borrow pit. The proposition was accepted by the Department.

Installation of Traffic Signs

Senator E. W. Waybright of Jacksonville, representing Scenic Safety Signs, Inc., of Tampa, Florida, submitted to the Department the proposal of his client that it will, without cost to the Department, install at turns, curves and other dangerous places on the State highways reflector signs of approved design, if the Department will permit said firm to place thereon a small amount of advertising, consisting principally of the name of the advertiser and his or its place of business. No action was taken on the proposal, pending an investigation of the legal power of the Department to entertain the same, and to make an exclusive contract for such purpose.

Glades County, Road 26

Senator E. J. Etheredge, DeSoto City; J. H. Peeples, Moore Haven; J. H. Whitten, Moore Haven; M. S. Hayes, Moore Haven; J. S. Cottrell, Moore Haven; R. L. Murray, Moore Haven, J. P. Moore and I. E. Scott, of Moore Haven, a delegation from Glades County, requested that that section of Road 26 between Main's Corner and Moore Haven be surface treated. The Department, through the Chairman, stated that it was impossible to do this, but that the State Highway Engineer will investigate the feasibility of scarifying and reconstructing the same.

Highlands County

Senator E. J. Etheredge extended to the Department the thanks of the county commissioners and citizens of Highlands County for the work which the Department has done in that county.

Hillsborough County

Messrs. W. T. Williams, of Riverview, Chairman, Board of County Commissioners; Hon. J. T. Gunn, Member; J. N. Holmes, Member, and W. T. Watkins and J. R. Hendry, of Tampa, formed a delegation appearing before the Department from Hillsborough County. This delegation requested the construction of that portion of State Road No. 5 north of Silver Springs and that portion of the same road in Hillsborough County south of the Alafia river.



Montbrook, on State Road No. 5, Levy County.

They were informed that this work would probably be undertaken during 1929.

Inquiry having also been made as to the construction of the bridge across Alafia river, the Department, through the Chairman, stated that it is impossible to do anything during the present year; that the plans are ready and that the work will probably be begun early in 1929.

In response to an inquiry as to the status of Road 17 in Hillsborough County, they were informed that the construction of the grade is progressing satisfactorily.

Okeechobee County, Road 29

T. W. Conely, Representative, and Ed Alderman, Chairman, Board of County Commissioners, from Okeechobee County, requested the Department to insert advertisement for bids for hardsurfacing two projects on Road 29 in said county, the contract for said work to be let by the county and county funds only to be used in such construction. This request was granted and the engineering department instructed to prepare the necessary advertisement.

Sarasota County

A delegation from Sarasota County, consisting of John Carter appeared before the Department and expressed appreciation of the Board of County Commissioners for the work which the Department has done and is doing in said county. They requested that the Department take over for maintenance a portion of State Road 18 in said county.

Projects 807-A and 807-C, Road 25

The Chairman reported to the Department that the storm of September, 1928, washed away a considerable portion of the grade and base placed by R. C. Huffman Construction Company, under its contract with the Department. He stated that he had made arrangements with said firm to replace the

work so destroyed by act of Providence, at the unit prices in its original contract.

Thereupon, on motion of Mr. Schilling, seconded by Mr. Green, the following resolution was unanimously adopted:

WHEREAS, The disastrous storm of September swept away a considerable portion of the work which had been done on Projects 807-A and 807-C, Road 25, Palm Beach County, which had been done by R. C. Huffman Construction Company, under its contract with the State, and

WHEREAS, Such destruction of work was due to causes which could not have been foreseen or prevented, but to the Act of God, and entirely without fault of the contractor,

NOW, THEREFORE, BE IT RESOLVED, That the action of the Chairman in agreeing to and with said contractor to replace the said work so destroyed at and for the unit prices named in its contract, be and the same is hereby ratified, approved and confirmed; and be it further

RESOLVED, That the Chairman be and he is hereby authorized and empowered and directed to have the said road restored to its condition prior to said storm, in such manner as he shall deem best after consultation with the Department's engineers.

LEON COUNTY

State Road No. 10

On motion of Mr. Bayliss, seconded by Mr. Green, the following resolution was adopted:

WHEREAS, On the 15th day of August, A. D. 1928, the following agreement was entered into between the Board of County Commissioners of Leon County and the State Road Department, acting by and through its Chairman, to-wit:

THIS AGREEMENT made and entered into this 15th day of August, A. D. 1928, by and between the

State Road Department of the State of Florida, acting by and through the Chairman thereof, and the County of Leon, acting by and through the Board of County Commissioners of said County;

WITNESSETH:

WHEREAS, The State Road Department has received bids for the construction of that part of State Road No. 10 in said County of Leon between Tallahassee and the Georgia State line, the lowest of said bids being the sum of \$391,281.52; and

WHEREAS, The said Department desires to let a contract pursuant to said bid for the construction of a concrete highway on said section of said road in Leon County; and

WHEREAS, The Board of County Commissioners of Leon County have made available to the State Road Department the sum of \$150,000.00, and has transferred and delivered to said Department one hundred bonds, of the par value of One Thousand Dollars each, said money and said bonds to be applied by said State Road Department as county aid toward the construction of said road;

NOW, THEREFORE, THIS AGREEMENT WITNESSETH: That the said State Road Department, for and in consideration of the money and bonds hereinbefore mentioned, does agree to and with said Board of County Commissioners of Leon County, Florida, that it will use, expend and employ the said money hereinabove mentioned, and an amount equal to the par or face value of the bonds so transferred and delivered solely and only in the construction of a concrete highway on said section of said road; and said State Road Department further agrees to and with said Leon County that it will promptly enter into contract to construct a concrete highway on said state road in accordance with the low bid above recited, and at and for the sum of \$430,309.67, which includes the said low bid, and an additional amount of ten (10) percent thereof for engineering and contingencies.

The said State Road Department of Florida further agrees to and with the said Board of County Commissioners of Leon County that when the said bonds hereinabove described have been sold by said Department and the said Department has received the proceeds therefrom, that it will promptly pay to the said Board of County Commissioners the amount of interest accrued on said bonds from July 1, 1928, up to the date of this contract.

IN WITNESS WHEREOF, The said State Road Department has caused these presents to be executed by its Chairman and attested by its Secretary, and the said Board of County Commissioners of Leon County, Florida, has caused the same to be executed in its behalf by its Chairman and its Clerk, this 15th day of August, A. D. 1928.

STATE ROAD DEPARTMENT OF FLORIDA,

By F. A. Hathaway, Chairman.

(SEAL)

Attest:

W. P. Bevis, Secretary.

BOARD OF COUNTY COMMISSIONERS
OF LEON COUNTY, FLORIDA,

By Geo. J. Sullivan, Chairman.

(SEAL)

Attest:

Paul V. Lang, Clerk.

NOW, THEREFORE, BE IT RESOLVED by the State Road Department of the State of Florida, that

the execution of the said agreement hereinabove recited by the Department, through its Chairman, be and the same is hereby ratified and confirmed, and that this Department does hereby obligate itself to carry out the several agreements on its parts stipulated to be performed.

WALTON COUNTY

Roads 10, 33, 40, 60 and 115

On motion of Mr. Bayliss, seconded by Mr. Green, the following resolution was unanimously adopted:

WHEREAS, On the 1st day of October, A. D. 1928, the following agreements were entered into between the Board of County Commissioners of Walton County and the State Road Department, acting by and through its Chairman, to-wit:

THIS AGREEMENT, Made and entered into this 1st day of October, A. D. 1928, by and between the County of Walton, acting by and through the Board of County Commissioners of said county, hereinafter referred to as the County, party of the first part, and the State Road Department of the State of Florida, acting by and through its Chairman, and hereinafter referred to as the Department, party of the second part,

WITNESSETH:

WHEREAS, The county has available to apply towards construction complete of roads in said county, as the proceeds of a bond issue, the following sums, to wit:

For State Road No. 10, being a road from west shore of Choctawhatchee river to Bruce, to Freeport, to Portland, and as near as practical along the north shore of Choctawhatchee Bay to west line of Walton County, \$220,250.00. Said road having been now definitely located as required by Chapter 12298, Laws of 1927, and known as projects No. 787 and No. 788, and

WHEREAS, It is the desire of the county that the said sum of money available for the construction complete of the road hereinabove mentioned shall be expended and applied toward the construction thereof by the State Road Department; now, therefore,

This agreement WITNESSETH:

That the Department does agree to and with the County as follows, to wit:

1. That the Department will within sixty days from date hereof begin the construction of said road hereinabove described, by contracts or by State forces, and will carry on said construction, uninterrupted and in such manner, as that the road complete of a standard specification or better, with all necessary bridges and drainage structures will be completed at the earliest practicable date, so far as the power of the Department shall permit. It being further understood and agreed that the surface on this road shall be of not less type than that used on any other road in Walton County. It being further understood and agreed that the road hereinabove described, being a secondary preferential road, that the Department is authorized to aid in the construction thereof, and that the Department will so expend the funds derived from the county that with such aid as it is able to expend, that the road will be completely constructed as agreed.

2. That upon completion by project the Department shall take same over for maintenance by the State as authorized by Chapter 13530, Laws of 1927,



State Road No. 5, Alachua County. Through Archer.

and the county does agree to and with the Department as follows:

1. That upon notification by the Department, that the county will make available to the Department, as required in construction the amount or amounts necessary until the amount heretofore stated as available for construction of the road hereinabove has been expended.

2. It is understood that the determination of the lowest responsible bidder on any contract or contracts let on any construction done under this agreement shall be lodged and vested in the Department.

IN WITNESS WHEREOF, The said Department has caused these presents to be executed by its Chairman with its corporate seal affixed, and the said county by the Chairman and Clerk of the Board of County Commissioners, with its corporate seal affixed, all in duplicate.

WALTON COUNTY, FLORIDA,

By W. I. Stinson,
Chairman of Board of
County Commissioners.

Attest:

M. T. Fountain,
Clerk Board of County
Commissioners.

(SEAL)

STATE ROAD DEPARTMENT,
By F. A. Hathaway,
Chairman.

(SEAL)

THIS AGREEMENT, made and entered into this the 1st day of October, 1928, by and between the County of Walton, acting by and through its Board of County Commissioners of said county, hereinafter referred to as the County, party of the first part, and the State Road Department of the State of Florida, acting by and through its Chairman, and herein-

after referred to as the Department, party of the second part,

WITNESSETH:

WHEREAS, The county has available for the construction complete of roads in said county, as the proceeds of a bond issue, the following sums, to wit: For roads Nos. 33, 40 and 60, \$528,600.00.

WHEREAS, It is the desire of the county that the said sum of money available for the construction complete of the roads hereinabove mentioned shall be expended and applied towards the construction thereof by the State Road Department; now, therefore,

This agreement WITNESSETH:

That the Department does agree to and with the county as follows, to wit:

1. That it will advertise for bids for the construction of a standard sand-clay road on State Road No. 33, and known as project No. 733 in said county, and for the construction of a standard sand-clay road on that part of State Road No. 40 in said county between the Alabama State line near Floral, Alabama, and Freeport, Florida, and known as projects Nos. 734, 735, 751 and 752, and that it will award contract or contracts looking to the construction of such standard sand-clay roads, if and when the county shall make available to the Department as required in construction, the amount or amounts necessary to carry out and satisfy such contract or contracts, together with an additional sum of 10% thereof for engineering and contingencies, and the department agrees that it will in the same manner, after surveys have been completed and right-of-way secured, let contracts for the construction of a standard sand-clay road on road No. 60 if and when the county shall make available to the Department as required in construction, the amount or amounts necessary to carry out and satisfy such contract or con-

tracts, together with an additional sum of 10% thereof for engineering costs and contingencies.

2. That upon completion by project of State Roads Nos. 33, 40 and 60 in said county, hereinabove described, the Department shall take same over for maintenance by the State, as authorized by Chapter 13530, Laws of 1927.

And the county does agree to and with the Department as follows, to wit:

3. That upon notification by the Department of the amount required for any contract in the construction of State Road No. 33, and that portion of State Road No. 40 hereinabove described, and State Road No. 60 it will make available to the department, as required in construction, the amount of money necessary for such contract, as required by the bid submitted by the lowest responsible bidder together with an additional sum of 10% thereof for engineering and contingencies.

4. It is understood that the determination of the lowest responsible bidder shall be lodged and vested in the department.

IN WITNESS WHEREOF, The said Department has caused these presents to be executed by its Chairman with its corporate seal affixed, and the said county by the Chairman and Clerk of the Board of County Commissioners, with its corporate seal affixed, all in duplicate.

WALTON COUNTY, FLORIDA,

By W. I. Stinson,
Chairman of Board of
County Commissioners.

Attest:

M. T. Fountain,
Clerk of Board of
County Commissioners.

(SEAL)

STATE ROAD DEPARTMENT,

By F. A. Hathaway, Chairman.

(SEAL)

THIS AGREEMENT, Made and entered into this 1st day of October, A. D. 1928, by and between the County of Walton, acting by and through the Board of County Commissioners of said county, hereinafter referred to as the County, party of the first part, and the State Road Department of the State of Florida, acting by and through its Chairman and hereinafter referred to as the Department, party of the second part,

WITNESSETH:

WHEREAS, The county has available for the construction of a road in said county, as the proceeds of a bond issue, the following, to wit:

For Road 115 (formerly designated Road 110) \$176,200.00, and

WHEREAS, It is the desire of the county that the said sum of money available for the construction of the road hereinbefore mentioned shall be expended and applied towards the construction thereof by the State Road Department; now, therefore,

THIS AGREEMENT WITNESSETH: That the parties hereto do agree to and with each other as follows, to wit:

1. That the Department will advertise for bids for the clearing, grubbing, grading and necessary drainage structures on one project on State Road 115, and will let contract or contracts for such construction, if and when the county shall make avail-

able to the Department, and in the manner required by the Department, the amount or amounts necessary to carry out and satisfy said contract or contracts, together with an additional sum of ten percent (10%) thereof in each instance for engineering and contingencies; and that the Department will in similar manner and under similar conditions advertise for bids and let contracts for other clearing, grubbing, grading and drainage structures until the entire work of clearing, grubbing, grading and drainage structures has been completed, or the county funds available therefor exhausted.

2. That upon notification by the Department of the amounts necessary to the clearing, grubbing, grading and drainage structures on one project on State Road 115, as determined by the bids of the lowest responsible bidders therefor, it will make available to the Department, in a manner required by the Department, the amount or amounts required to carry out the contracts pursuant to said bids, together with an additional sum of ten percent (10%) thereof for engineering and contingencies; and that it will in like manner make available, in the manner required by the Department, such other sum or sums as shall be similarly found necessary for contracts on other and remaining projects of said road, so far as the funds available therefor shall extend or until the said grading has been completed.

3. It is understood that the determination of the lowest responsible bidder shall be lodged and vested in the Department.

4. That upon completion by projects of said Road No. 115, in said county, hereinabove described, the Department shall take same over for maintenance by the State, as authorized by law.

IN WITNESS WHEREOF, The parties hereto have caused this instrument to be executed in duplicate, this the 1st day of October, A. D. 1928.

COUNTY OF WALTON, STATE OF FLORIDA,

W. I. Stinson, Chairman,
J. J. Ward,
G. M. Bishop,
Em. Infinger,

As and Constituting the Board of
County Commissioners of said County.

(SEAL)

Attest:

M. T. Fountain,
Clerk, Board of County Commissioners.

STATE ROAD DEPARTMENT
OF STATE OF FLORIDA.

By F. A. Hathaway, Chairman.

(SEAL)

NOW, THEREFORE, BE IT RESOLVED by the State Road Department of the State of Florida, that the execution of the said agreements hereinabove recited by the Department, through its Chairman, be and the same is hereby ratified and confirmed, and that this Department does hereby obligate itself to carry out the several agreements on its part stipulated to be performed.

Award of Contracts Approved

On motion of Mr. Green, seconded by Mr. Schilling, the following resolution was unanimously adopted:

WHEREAS, Bids were asked by this Department for the construction of the projects hereinafter designated, and,

WHEREAS, The firms and individuals respectively named were the lowest responsible bidders thereon; now, therefore,

BE IT RESOLVED, That the action of the Chair-

man in awarding and executing the contracts hereinafter named be and the same is hereby ratified, approved and confirmed, which said contracts are as follows, to-wit:

Project No.	Road No.	County	Contractor	Type	Contract Price
56	1	Leon	Nelson Brothers	Concrete	\$391,281.52
53-C	2	Lake	Manley Construction Co.	Bit. Conc.	61,616.89
719	50	Suwannee	Broadbent Construction Co.	R. B. S. T.	82,768.00
764	50	Suwannee	Duval Engineering & Contracting Co.	R. B. S. T.	127,828.47
687-B	2	Lake	W. P. McDonald Construction Co.	R. B. S. T.	190,052.95
802-C	10	Okaloosa	Curry & Turner	G. & D.	41,405.39
740	10	Gulf	Baker-Lewis Construction Co.	Hauling	34,000.00
685	10	Franklin	L. L. Pararo Construction Co.	Hauling	85,000.00
723-724	66	Leon	W. B. Wright	Hauling	30,000.00



Long-leaf Yellow Pine Along State Road No. 5, Between Newberry and Archer.

On motion of Mr. Green, seconded by Mr. Schilling, the following resolution was unanimously adopted:

WHEREAS, Contracts have been awarded by the Chairman for maintenance as hereinafter set out, and,

WHEREAS, It appears that the action of the Chairman in so awarding such contracts is in the

interest of the progress of the work and that the same have been let at prevailing prices; now, therefore,

BE IT RESOLVED, That the action of the Chairman in awarding such contracts be and the same is hereby ratified, approved and confirmed, which said contracts are as follows:

Project No.	Road No.	County	Contractor	Work Contemplated	Price
669-W	27	Collier	H. E. Wolfe Construction Co.	S. T.	\$ 53,505.60
669-V	27	Collier	Alexander, Ramsey & Kerr	Guard Rail	35,200.00
669-V	27	Collier	H. E. Wolfe Construction Co.	S. T.	105,740.40
614	5	Sarasota	W. J. Bryson	Asphalt Surf.	34,632.10
	25	Palm Beach	R. C. Huffman Construction Co.	Maintenance	45,000.00

Expense Accounts Approved

On motion of Mr. Schilling, seconded by Mr. Green, the expense accounts of the members were approved and ordered paid.

There appearing no further business, the Department was adjourned.

Personally we crave luxury, but we have never seen a \$5,000 funeral that we wanted.—Dallas News.

What 31 States Are Doing in Accident Prevention

Very Interesting Reports from Different States

IN order to get authoritative information from the various states as to what they are doing to prevent highway accidents, a letter was sent to each state highway department with the request that they write a letter summarizing the work they are doing in this regard. Thirty-one states replied, each denoting interest in this great problem, and with the exception of one or two states plans for accident prevention were described in detail. The presentation of this data will be more or less a summary of what these 31 states have indicated they are doing toward the prevention of highway accidents.

This report is divided as follows: Engineering, dealing with all the physical features of the highways, including construction, and maintenance; legislation pertaining to the laws controlling the construction and use of the highways; operation dealing with the use of the highways; education dealing with the user of the highway and enforcement with operation and use of the highways.

Engineering

There is a striking similarity in the programs of all states. Practically all engineers and commissioners recognize that the construction of highways in such a way that they may be devoid of any hazard is an essential to highway safety.

Signs and Markings

It is almost universally accepted that the proper signs and markings are now essential for highway safety.

Traffic stripe on curves is very generally practiced. In some states the center stripe is used the entire distance of the highways, especially on heavy traffic roads. In at least one state a special color stripe is used on all curves or grades that are especially dangerous. This special color, probably yellow, also indicates that cars cannot pass at these particular locations.

Practically every state is installing guide and precautionary signs for the benefit of the highway user, if they have not already done so. In most instances the signs are those recommended by the American Association of State Highway Officials. Several of the states at the present time are practicing the installation of a white cross wherever there has been a fatal accident. This has been practiced for many years by a few of the states, but now it seems to be more or less a universal practice.

Traffic is required to stop before entering the trunk highways in some states, and in the case of trunk highways intersecting, semaphores or "stop and go" lights have been installed for the purpose of taking care of the traffic. In one state intersections of state highways are constructed with curves of 500 foot radius and no obstructions are allowed on the inside of the curve.

Grade Crossings

The elimination of grade crossings is one of the great features contributing to highway safety, and all states have programs for this work in proportion to funds available. Where there are not sufficient funds to eliminate grade crossings, warning devices are erected to call the danger of the crossing to the attention of traffic.

Visibility

Visibility is commanding considerable attention. It was referred to by many of the states. Minimum visibility is not less than 300 feet, and many of the states are attempting to get a visibility of 500 feet. Some states are attempting to get visibility of 500 feet on vertical curves and 350 feet on horizontal curves. Most of the states are cutting brush and removing other obstacles on highways or right of way that in any way impairs the visibility of the drivers of vehicles.

Guard Rail

Guard rail is another important detail of construction that can be considered under engineering. In some states this item is regulated in proportion to the funds available for road work, but as nearly as possible guard rail is constructed on all fills over 4 feet in height and at dangerous curves, or other places which should require special treatment for the safety of the driver.

Embankments

Several of the states are constructing embankments with 4:1 slope so that vehicles in time of necessity can run down the slope without turning over.

Ditches

One state refers to the construction of wide ditches with flat slopes. These are termed locally "in and out ditches" indicating that a vehicle can drive in the ditch in case of necessity and still come out without accident.

Pavements

Engineers have recognized the value of wider pavements for the purpose of eliminating accidents. It is now almost universal practice to super-elevate and widen all curves and this has been recognized as an important contribution to highway safety. There is no reference made to different types of surfaces in connection with highway safety.

Legislation

In some of the states elaborate measures have been passed or are being passed by legislatures for the purpose of regulating traffic and pedestrians and to assist in the prevention of highway accidents.

Licensing Drivers

One detail of legislation referred to by many of the states is that of licensing drivers of vehicles after passing examinations showing they are able to drive such vehicles. The examination would require knowledge of the rules for the use of the highways, speed limits, as well as the ability to satisfactorily operate an automobile.

Speed Limits

Speed limits vary widely in the different states, ranging from practically a limitless speed to 15 or 20 miles per hour.

Traffic Patrol

Traffic patrol systems have been adopted by many states, and are advocated by many others.

Enforcement

In certain states we find that the prescribed legislative traffic regulations are enforced, while others do not take them seriously.

Contracts Awarded by State Road Department January 1st, 1928, to November 15th, 1928

Contractor—	Project No.	Road No.	County—	Length Miles	Length Feet	Contract + 10 %	Type
Sutton Bros.	55-B	14	Alachua	.....	457	\$ 54,272.17	Concrete
General Const. Co.	677-D	13	Levy	.....	1,335	43,000.98	Timber
Frost Const. Co.	700-B	17	Hillsboro	.....	260	54,775.16	Concrete
Sutton Bros.	764-B	50	Suwannee	.....	113	19,043.82	Conc. Overh'd.
Duval Engr. & Contr. Co.	677-D	13	Levy	8.91	.....	110,370.35	R. B. S. T.
E. F. Powers Const. Co.	710-C	17	Hillsboro	12.69	.....	95,125.45	C. G. & G.
B. Booth	755	17	Polk	11.22	.....	58,518.86	C. G. & G.
Little & Lee	757	2	Polk	10.26	.....	63,516.17	C. G. & G.
Little & Lee	758	2	Polk	8.34	.....	46,380.34	C. G. & G.
Gilbert & Hadsock	732	17	Polk	8.94	.....	57,077.26	C. G. & G.
C. G. Kershaw Contr. Co.	736	39	Holmes	8.58	.....	45,097.93	C. G. & G.
C. G. Kershaw Contr. Co.	709	39	Holmes	9.09	.....	53,931.71	C. G. & G.
Morgan-Hill Paving Co.	61-C	1	Gadsden	9.77	.....	244,581.31	Concrete
Franklin Const. Co.	710-A	17	Hillsboro	6.18	.....	38,592.08	C. G. & G.
E. M. Chadbourne	697	1	Escambia	.14	666	3,401.25	Surface
Robert G. Lassiter & Co.	683-A	4	Palm Beach	8.04	.....	264,999.43	Concrete
Rutherford Const. Co.	695	2	Lake	3.00	.....	46,992.07	R. B. S. T.
S. G. Collins	827	1	Escambia	8.12	.....	50,151.29	C. G. & G.
M. C. Winterburn, Inc.	61-A	1	Gadsden	10.00	.....	231,578.27	Concrete
Phoenix Asphalt Paving Co.	669-X	27	Collier	9.40	.....	28,814.77	Surface T'd.
Everglades Const. Co.	62-C	24	Osceola	11.83	.....	115,303.71	C. G. & G.
A. D. Weeks	62-D	24	Osceola	12.62	.....	83,299.72	C. G. & G.
A. D. Weeks	61-A	24	Osceola	12.52	.....	66,571.01	C. G. & G.
R. C. Huffman Const. Co.	807-A	25	Palm Beach	10.81	.....	201,713.22	R. B. S. T.
R. C. Huffman Const. Co.	807-C	25	Palm Beach	6.14	.....	99,923.54	R. B. S. T.
C. A. Steed & Sons, Inc.	804	67	Glades	18.55	.....	416,083.52	R. B. S. T.
Duval Engr. & Contr. Co.	659	3	Clay	7.25	.....	95,449.25	R. B. S. T.
Silas Gibson	815	54	Okaloosa	13.58	.....	60,680.23	C. G. & G.
W. J. Bryson Paving Co.	819	54	Okaloosa	4.69	.....	20,979.67	C. G. & G.
W. J. Bryson Paving Co.	823	41	Okaloosa	9.18	.....	34,085.34	C. G. & G.
W. J. Bryson Paving Co.	824	41	Okaloosa	9.81	.....	59,898.02	C. G. & G.
Perkins Const. Co.	820-B	96	Jefferson	.....	114	4,881.25	Timber
Maddox Foundry & Mach Co.	743	10	Bay	.....	120	13,774.47	Timber
C. C. Hayes	802-A	10	Okaloosa	8.67	.....	76,559.56	C. G. & G.
P. B. Alsobrook	661	2	Lake	0.10	.....	1,980.00	C. G. & G.
Central Station Equipment Co.	769	5	Lee	.70	4430	585,216.61	Concrete
Collins Const. Co.	803	10	Okaloosa	11.13	.....	82,342.33	G. & D.
Nelson Brothers	56	10	Leon	12.98	.....	430,409.67	Concrete
Manly Construction Co.	53-C	2	Lake	2.85	.....	67,778.57	Bit. Conc.
Broadbent Constr. Co.	719	5-A	Suwannee	8.57	.....	91,044.80	R. B. S. T.
Duval Engr. & Contr. Co.	764	50	Suwannee	12.00	.....	140,666.31	R. B. S. T.
Wm. P. McDonald Const. Co.	687-B	2	Lake	15.22	.....	209,058.24	R. B. S. T.
Curry & Turner	802-C	10	Okaloosa	10.24	.....	45,545.92	G. & D.
R. J. Carroll	738	42	Jefferson	10.17	.....	69,488.78	G. & D.
Curry & Turner Const. Co.	820	96	Jefferson	9.45	.....	67,870.63	G. & D.
H. E. Wolfe	669-W	27	Collier	16.00	.....	58,856.15	S. T.
Baker & Lewis Const. Co.	740	10	Gulf	9.62	.....	37,400.00	Hauling rock
Alexander, Ramsey & Kerr, Inc.	669	27	Collier	32.00	.....	39,720.00	Guard Rail
L. L. Pararo Const. Co.	685	10	Franklin	14.43	.....	93,500.00	Hauling rock
H. E. Wolfe	669-V	27	Collier	31.62	.....	116,314.44	S. T.
W. B. Wright	723 & 724	66	Leon	21.41	.....	33,000.00	Hauling S.&C.
Bishop Contracting Co.	821	96	Jefferson	5.18	.....	29,359.05	G. & D.
J. B. McCrary Engr. Corp.	672	1	Leon	9.92	.....	208,641.07	Concrete
R. G. Lassiter & Co.	673	1	Gadsden	14.97	.....	292,508.17	Concrete
W. J. Bryson Paving Co.	733	33	Walton	4.23	.....	47,373.22	Sand Clay
Penton-Mathis Const. Co.	734	40	Walton	7.89	.....	69,581.67	Sand Clay
W. J. Bryson Paving Co.	735	40	Walton	13.71	.....	130,342.33	Sand Clay
W. J. Bryson Paving Co.	751	40	Walton	7.28	.....	53,739.49	Sand Clay
W. J. Bryson Paving Co.	752	40	Walton	8.72	.....	63,037.15	Sand Clay
W. J. Bryson Paving Co.	788	10	Walton	17.54	.....	164,274.07	G. & D.
W. J. Bryson Paving Co.	842	115	Walton	10.00	.....	76,591.51	G. & D.
H. E. Wolfe Const. Co.	669-C	27	Dade	12.00	.....	74,142.12	Surf. T.
Totals.....				588.26	6,829	\$6,339,205.48	

A few of the states have referred to the enforcement program which will take place following the educational campaign. They feel that the highway commissions should first construct the roads in a manner that will remove from the highways the maximum number of hazards. The user of the highway should then be regulated in such manner as to guarantee safe passage for himself and other users of the highway when the proper legislative requirements are respected.

Educational Work

Several states have actually commenced educational campaigns for the purpose of instructing drivers and pedestrians how best to use the roadways and have the least number of accidents. In some of the states elaborate educational campaigns are being carried on. These consist of cooperation with the traffic patrols and talks and lectures by traffic police and members of the highway commission before civic clubs, schools and other organizations. Posters are being used to very good advantage

and information is graphically presented to the user of the highways. Safety councils have been organized and in one state a "Safe Drivers Club" is being conducted. In the states where the problem of highways safety is the oldest and where it has been met with what might be termed the best success the value of the educational campaigns has been recognized and everything possible to increase and improve the educational campaign on highway safety is being done.

Some of the most interesting details that have been brought out by the various states are listed below:

Elimination of Grade Crossings

California, Colorado, Connecticut, Delaware, Florida, Idaho, Kentucky, Maine, Michigan, Nebraska, New York, North Carolina, Ohio, Oklahoma, Minnesota, Texas, Washington.

Relocation of Line and Grades

Colorado, Connecticut, Delaware, Idaho, Kentucky, Maine, Massachusetts, Michigan, Montana,



State Road No. 13. Entrance to Cedar Key.

Nebraska, New Jersey, New York, New Mexico, North Carolina, North Dakota, Ohio, Oklahoma, Minnesota, South Carolina, South Dakota, Texas, Utah.

Increasing Visibility

California, Connecticut, Oklahoma, Minnesota, South Dakota, Texas, Washington.

Signs and Markers

California, Colorado, Connecticut, Florida, Idaho, Maine, Massachusetts, Michigan, Nebraska, New York, New Mexico, North Carolina, Ohio, Oklahoma, Missouri, Minnesota, South Carolina, South Dakota, Texas, Utah, Virginia.

Educational Campaigns

Alabama, Colorado, New York, New Mexico, North Dakota, Oklahoma, Minnesota and Texas.

Traffic Stripes on Curves

California, Florida, Idaho, Massachusetts, Michigan.

Traffic Control

Alabama, Connecticut, Delaware, Idaho, Michigan. The above subjects have been especially mentioned by the states listed as a part of their highway safety efforts.

In conclusion it may be stated that the entire highway safety program can be divided into two parts—the one including the engineering features, which in turn includes the construction, maintenance and operation of the highways—the other the education of the user of the highway.

Practically all state highway commissions are now constructing their roads in accordance with the principles that are conducive to highway safety, and it appears that the major problem at the present time is the education of the user of the highways, including the vehicle driver and the pedestrian. Highway

safety campaigns are being conducted by some 25 or 30 organizations, all attacking the problem in different ways and all having a beneficial effect upon the subject.

Statistics are of great value in studying this problem, and all highway commissions are urged to gather statistics which will show the reason for highway accidents and then bend every effort for the correction of the conditions which cause the accidents.

Probably one of the most important features that should be required by all states is the question of the drivers' license law, such as is already in operation in many of the states. This law should carry with it a careful examination of the driver before a license is issued. It is absolutely necessary that all users of the highway feel their responsibility in bringing about fewer accidents on the highways. Ninety-five per cent of all accidents are the result of individuals, which shows that the engineers have, to a very great degree, perfected the highway and the vehicle, and now it is up to the vehicle user and the pedestrian to do their share of correcting the conditions which are each year causing about 25,000 deaths.

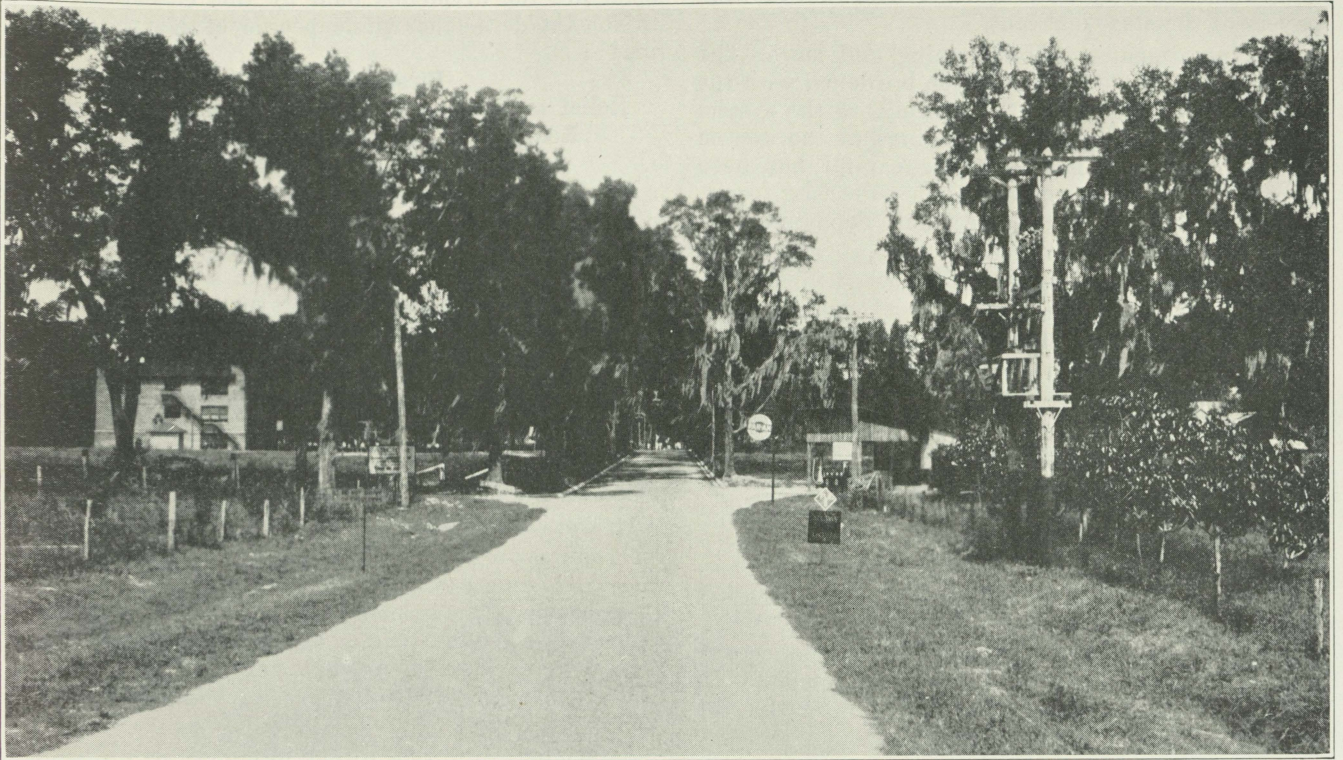
Complete cooperation between highway departments, newspapers, civic clubs, safety councils, schools—in fact every organization—would quickly bring about fewer accidents on our highways.—Nation's Traffic.

Cause for Complaint

"I wish to complain," said the bride haughtily, "about the flour you sold me. It was tough."

"Tough, madam?" asked the grocer.

"Yes, tough. I made a pie with it, and my husband could hardly eat it."



Road No. 5, Alachua County. Entering Archer from the South.

Profits Earned by the Highways of North Carolina

By Frank Page, Chairman, North Carolina Highway Commission

THE need for transportation is so fundamental and universal that the instrumentalities of transportation have always offered an appeal to investors. When the commerce and passenger traffic of the world was borne either by ships at sea or caravans across country, the earliest fortunes accumulated by man were from these means of transportation. The Vanderbilts and Goulds—transportation kings—were the first of the species of millionaires in America.

While the means and methods of transportation have always been recognized as a public necessity and, at least in modern times, have come to be regarded as a semi-governmental function, practical judgment has, for the most part, held to the view that public transportation is better provided by private capital and private management.

Our first ventures in good roads in North Carolina, and perhaps in most other states, were by private capital, and the legal provision for the establishment and maintenance of toll roads is a familiar chapter in the codes of most of the states and legal text books.

Before the development of railroad transportation there were in my state several hundred miles of plank roads, privately built and operated, and tolls paid for their use.

In 1921 North Carolina, after much pioneer work by good roads advocates in the several counties, and state-wide agitation by the North Carolina Good Roads Association, was induced to make an initial investment of \$50,000,000 in roads designed to meet

the exacting requirements of a state-wide system. The original scheme embraced 5,500 miles.

This has grown to 7,500 miles, and connects every county seat and principal town in the one hundred counties of the state, as well as all state institutions and state and national parks, and interstate highways in adjoining states.

The investment from bonds has grown from 50 to 115 million dollars, in addition to which we have expended approximately 12,000,000 dollars of Federal Aid.

The total bonded indebtedness of North Carolina at the time it began this investment in highways was \$11,200,000. During these past seven years this state, noted since Colonial days for its conservatism, has invested in this new enterprise 50 percent more money than had been invested by all the states in the Union for rural highways in the first century and a quarter of the nation's existence.

Some of our own citizens and many of our neighbors in adjoining states looked on in amazement at what they thought another case of "frenzied finance," expecting to see us soon shipwrecked upon the shoals of bankruptcy. Somehow, we have so far escaped, and have the satisfaction of seeing the investing public absorb each new issue of highway bonds at a lower interest rate or higher premium, than the one before.

While the bonds for this great investment are, of course, issued in the name of the state, and backed by the state's full faith and credit, they never have,

and, we confidently believe, never will, cost the taxpayers of the state one cent.

The investment is self-sustaining and more. The taxes of the people have not been burdened with the cost of a house in which the earnings of the system are collected, but from the earnings of the system the best public building at the capital has been erected to house the entire revenue collecting forces, including the automobile licensing department of the state.

How is this great investment financed? Simply the old idea of the toll road, in a more convenient form. The whole system is supported by a privilege or license fee of \$12.50 per year, and up, depending upon the horsepower of the automobile, and a charge of 4 cents per gallon of motor fuel used in the operation of automobiles upon the roads.

The gasoline tax was comparatively new and untried when we began it seven years ago. Now 46 of the 48 states have a somewhat similar system. Each year has seen this method of financing become more popular and the fund so collected mount to higher figures.

We are providing by payment of serial bonds and investment of sinking funds, for the complete retirement of the investment of \$115,000,000 by the year 1952.

In addition, our system is founded upon the idea that maintenance, constant and efficient, is essential to permanence; that honest and careful construction, intelligent and intensive maintenance will make replacement costs comparatively small.

After providing for the amortization of the capital investment of \$115,000,000 and the expense of operation and maintenance, our income from gas and license fees—the operating income—if you please, has been sufficient to provide a betterment or replacement fund of \$4,574,828.25 in 1926; \$5,673,374.97 in 1927, and an estimated balance of \$8,000,000 in 1928.

There is little reason to believe that the saturation point in the ownership and operation of automobiles has yet been reached in North Carolina. In the number of motor vehicles to the number of persons, we stand 38th from the top, having as yet only 1 motor vehicle for each 7.42 population. The agricultural state of Kansas heads the list, with one automobile for every 2.96 persons.

We have, therefore, a good deal of margin in which to develop, and the records show that last year, upon percentage basis, North Carolina led all of the states in the purchase of new automobiles, increasing our registration by 11.8 % against an average of 5.170% for the whole country.

This is no sporadic jump. This increase has been constant. In 1922 it was 22.8%; in 1923, 35.2%; in 1924, 22.4%; in 1925, 12.5%; in 1926, 13.1%. We predict, therefore, with some confidence, that our operating income will be adequate for the amortization of our capital investment and the maintenance and gradual extension of our system.

An investment, however, that is only self-sustaining lacks the one essential element that it takes to appeal to the average American, and that element is profit, usually expressed in terms of dividends.

This North Carolina enterprise that I have been describing meets, I think, this essential requirement.

What are the dividends paid by this enterprise to its stockholders—the whole people of North Carolina?

First Dividend

Relief to Towns and Counties and Saving to Road Users Through Reducing Wear and Tear and Losses

North Carolinians show their close kinship to all other Americans in their dislike of taxes. Prior to the establishment of a state highway system, the 7,500 miles of road comprising the system were a direct burden upon the taxpayers of the state. Exact figures are not obtainable, but from a rather extensive observation I am convinced that these roads represented an average expenditure to the counties of the state, in maintenance and construction, both being done inefficiently, not to say wastefully, of \$400 per mile, or an annual burden upon the taxable property of the state amounting to \$3,000,000.

The wear and tear upon vehicles and the loss to the users of the roads by reason of their poor condition would run into a figure that would stagger the imagination. The immediate relief of the counties and their local subdivisions, of the construction and care of this amount of mileage, carrying, as it does, perhaps 80% of the traffic, is a dividend of prime importance.

Associated with this direct dividend is an incidental benefit which cannot be stated in terms of money—the educational value to the counties, cities and towns, in the methods used by the state in the construction and maintenance of the state system, which they have rapidly seized upon and copied in the care of their own roads and streets.

The laboratory service and expert engineering advice now made available to these local divisions of government by the State Highway Commission are destined to be among the most important contributions, or dividends, that this enterprise will pay to its citizens.

Second Dividend

Educational Opportunities That Alone Justify Investment

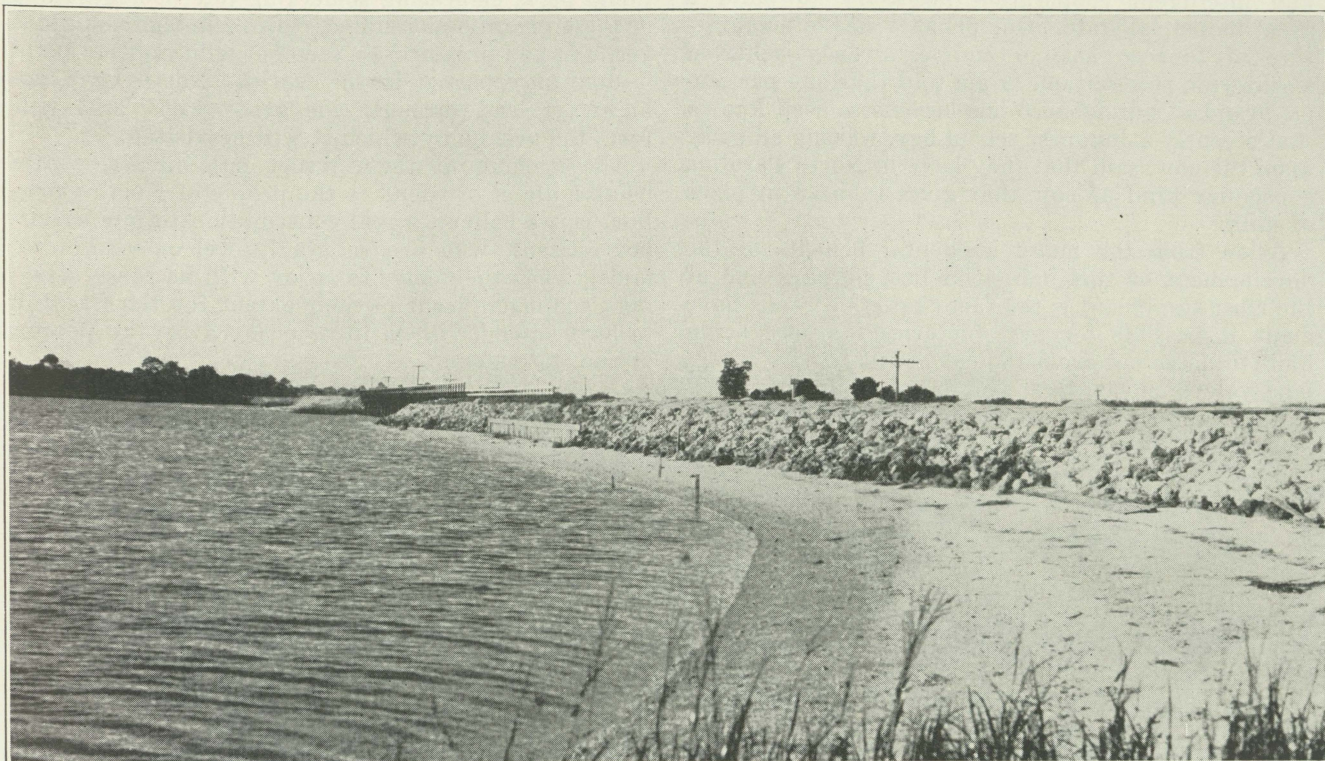
Beginning with the inauguration of Governor Aycock, in 1900, North Carolina's educational progress constitutes a story unsurpassed in the development of any commonwealth. Our expenditure for the operation of public schools has grown from \$9,000,000 in 1920 to \$24,000,000 in 1927, and our investment in public school buildings has grown from \$1,000,000 in 1900 to \$93,000,000 in 1928.

The development of this school system, with its modern consolidated schools served by school busses, would have been impossible except for the development of the state's highways. Today 1,050 of the schools are being served by 3,234 busses, transporting daily from the remote sections of the districts, 120,318 children. This dividend, being translated daily in terms of educational opportunity to the childhood of the state would alone justify the investment.

Third Dividend

Agricultural Products Transported by Truck Swiftly, Easily, Safely, Far; and Rural Life Enriched Financially and Socially

While North Carolina is rapidly developing its industrial life, it is primarily an agricultural state, ranking second to Texas only, among the Southern



Shoulder Protection of Native Flint Rock. Road No. 13, Near Cedar Key.

States, in the annual value of its farm crops. Our two major crops are cotton, amounting to approximately \$100,000,000 per year, with tobacco a close second, bringing the farmers approximately \$90,000,000 per year.

Good roads, of course, are a great benefit to these major crops, but it is perhaps in the handling of the perishable truck, fruits and berries that we see the most striking and direct dividend from good roads. It so happens that our greatest industrial development has been through the Piedmont, or central portion of our state. The state is, as you recall, much longer than it is wide, being approximately 600 miles from east to west. At various seasons of the year one can see upon the streets of the industrial towns in central Carolina trucks from the eastern end of the state loaded with fresh vegetables, or strawberries or fish and oysters from the coast.

In season, trucks loaded with the famous sandhill peaches, from the southern end of the state, are in evidence all about North Carolina. In the fall of the year the luscious apples from the mountains of the west, or the late potato and cabbage crop, find a ready market among the thousands employed in the industrial plants throughout the Piedmont.

It was interesting to note in the season just closed, that from two small towns in eastern North Carolina strawberries equivalent to 132 carloads were moved by trucks, and I am reliably informed that many of these trucks leaving North Carolina with strawberries placed them on the markets in New York City 24 hours ahead of the refrigerator service of the railroad companies, and that the berries arrived on the market in better condition and were sold at an increased price over those shipped by train.

There are many farmers in the central-western portion of the state who are fast changing from

grain raising to growing grasses and clover, on which feed thousands of best breed of dairy cattle. The products of these dairies are daily transported by truck to creameries and cheese factories located in some town with convenient railroad facilities, thereby securing the advantage of the quantity buying competition.

In addition to this direct monetary dividend to the agricultural interests of the state, rural life has been enriched by its easy accessibility to all of the amusement, intellectual and commercial opportunities in the larger towns.

Fourth Dividend

Factories Avoid Congested Centers and Labor Needs No Tenements in Towns

But, as highly as we value our farms and the important part that they play, and always will play, in the life of our state, we are trying in North Carolina to build a balanced state. We are now spinning in North Carolina more cotton than we raise, and take just pride, I think, in the fact that, while Massachusetts may have a few more spindles than we, the records show that in spindle hours of operation we are no longer second even to that great manufacturing state.

With the rapid harnessing of our rivers that leap from the altitudes of the mountain ranges of western North Carolina, comprising nearly 400 peaks that tower from 1,000 to more than 6,000 feet elevation, rushing down through the rolling Piedmont, to water the great agricultural plains, we have at hand the "white coal" that appeals to those far-sighted manufacturers who want a permanent and dependable power supply.

Likewise with the native born population, the nearest 100% pure American in any state, we have a labor supply easily adapted to the work of skill

and intelligent cooperation necessary to build a great industrial state. Our primacy in the manufacture of tobacco has, of course, already achieved world-wide recognition. I am told that one particular brand of our tobacco has become so well known that recently a Japanese school-boy, writing an essay upon the cow, said that they have in North Carolina a peculiar kind of cow that gives tobacco in place of milk.

Aside from the many incidental benefits of the development of this industrial life, perhaps one of the most significant is the fact that good roads have made it possible for new factories that are being built to move out from the congested centers where land values and taxes are high, and yet not be compelled to build tenement houses for their employes.

At least one textile plant recently completed in North Carolina draws its entire labor supply from the surrounding sections, the labor coming and going by automobile, thereby obviating the necessity of investment in tenement houses, and many of our furniture factories depend entirely upon automobile transportation for their labor supply. This dividend from the good roads system of North Carolina, in addition to its commercial value, will certainly make for better living conditions among our industrial population.

Fifth Dividend

Magnificent Resorts of Coast and Mountains and National Park Made Accessible to All

When away from home I have observed that perhaps the two best known places in North Carolina are Pinehurst and Asheville. Both are justly famed as resorts, but these two important resorts by no means exhaust the possibilities of North Carolina in this respect.

Our reef-bound sounds on the coast have long been famed in select circles for the opportunity they offer in fishing in summer and duck shooting in winter, but, until the development of good roads, these places were so inaccessible that their attractions were known to only comparatively few of our own people. Now they are at the door of eastern America.

Our mountains in the western part of the state are dotted with beautiful lakes, delightful resort hotels, golf courses and other amusements, that hold a peculiar charm. I was amused to hear a comparatively well-posted citizen of an adjoining state remark recently that it was no wonder North Carolina had succeeded so well in its road program, because, according to him, we did not have any hill country to contend with. He did not know that some of our roads have been blasted through solid rock for miles, that we have several hundred miles of road extending along the mountain sides more than 3,000 feet above the sea, and that the highest peak east of the Mississippi can now be reached by automobile, and that besides this great peak there are 76 other mountains in western North Carolina more than 5,000 feet in elevation.

Recently, through the magnanimous gift of the Laura Spelman Rockefeller Memorial and the cooperation of North Carolina and Tennessee, arrangements have been perfected and approved by the Federal government for the establishment, in the Great Smoky mountains, lying about one-half in North Carolina and one-half in Tennessee, of a na-

tional park, embracing something like 500,000 acres of these gigantic mountains, clothed in their original verdure, and presenting a scene of wild and majestic beauty unsurpassed in the world. North Carolina highways lead through this great park, and will form the avenue by which it will be visited.

The opening of these resort possibilities, while being a direct dividend to the people of North Carolina, is, we believe, a real contribution to our neighbor citizens, who are so gladly welcomed in our midst, when they come to enjoy with us these blessings, too magnificent in their extent for the Creator to have intended them to be enjoyed by the people of one state alone.

Sixth Dividend

Perfect Roads and Undeveloped Resources Win New Citizens

To paraphrase slightly a familiar quotation, we have observed that when these people "come to see, they remain to work." Some of our most useful citizens in North Carolina today came to our state first on a pleasure, or sight-seeing tour. While there they saw some of the undeveloped resources of the state, and have cast their lot among us, and are now as much North Carolinians as if they were born with tar on their heels. Many others, we are confident, will do likewise.

The thousands of tourists who travel our state highways will inevitably be among many who will help to develop these neglected things and surely a dividend not to be overlooked is this advertising which the state's highways do for the state's resources.

Seventh Dividend

Public Carrier System Which Roads Make Possible Means Millions of Value

Another dividend is the creation of a wholly new industry in North Carolina. A public carrier system for passengers and freight, covering 6,000 miles of State highway, with daily, and, in many instances, hourly schedules. The general funds of the state derive a direct revenue from this source, amounting to approximately \$200,000 per year.—Highway Engineer and Contractor.

HIGH-TYPE HIGHWAYS INCREASING RAPIDLY, SAYS ROADS BUREAU

With the cooperation of state highway departments, 8,184 miles of Federal aid highways were improved in the fiscal year 1927-28, and 2,014 miles that had been previously improved by Federal aid were given surfaces of higher type, according to the Bureau of Public Roads, United States Department of Agriculture. This work was done at a total cost of \$205,043,784, of which the Federal government paid \$88,056,984, or 43 percent, and the states paid the balance.

Under supervision of the bureau, 281 miles of National Forest roads were improved, bringing the total improved mileage of these roads to 3,775 miles. The National Forest road system embraces, at present, a total of 13,911 miles.

In the Federal aid system, there are 187,753 miles of interstate and intercounty highways, of which, on June 30, 71,074 miles had been improved with Federal assistance and 1,285 miles were undergoing stage construction, that is, were being given a higher



Protecting Expensive Roadbeds from Gulf Storms. Near Cedar Key, Road No. 13.

type of surface than when previously improved with Federal aid.

The 8,184 miles improved in 1928 include 2,182 miles of graded and drained earth roads; 844 miles of sand-clay; 1,836 miles of gravel; 92 miles of water-bound macadam; 464 miles of bituminous macadam; 136 miles of bituminous concrete; 2,533 miles of Portland cement concrete, and 42 miles paved with vitrified brick. There were 54 miles of bridges and approaches.

Federal aid highways are the most heavily traveled in the country. Increased demands of a growing traffic are shown by the greater increases in the types more suitable for heavy traffic. The mileage of high types of pavements built, such as bituminous macadam, bituminous concrete, Portland cement concrete, and vitrified brick, increased 19 percent in 1928, while the mileage of low types, such as water-bound macadam, gravel, sand-clay, and graded and drained increased about 9½ percent.

U. S. MOTOR VEHICLES IN 1927 TRAVELED 150,000,000,000 MILES

Gasoline consumption in the United States increased during 1927—12.4%. This is the estimate made by the American Road Builders' Association. Records show that the total gasoline consumption in the United States in 1927 was 11,563,490,000 gallons. California led all the states, using 1,017,681,000; New York came second with 892,890,000. The average gasoline consumption per car approximated 550 gallons on 13.5 miles per gallon. The total number of car miles traveled exceeds 150,000,000,000.—Service Bulletin, Iowa Highway Commission.

CONTROL RECKLESS DRIVING BY REQUIRING DRIVER'S LICENSE

Pennsylvania's motor vehicle operator's license law seems to be working very satisfactorily. It has the effect of keeping some of the irresponsible drivers off the highways. In one month, from August 15th to September 15th, the Highway Department revoked licenses of 213 persons for periods ranging from 60 days to 12 months.

Intoxication was the cause for revocation of 93, reckless driving 23, operating without the consent of the owner, 16, other causes were physical incapacity, bribery, failure to stop after accident, unable to interpret traffic signals, and failure to report an accident.

The reckless driver is a menace on the highway. He carries a potential threat to everyone he meets on the road as well as those in his own car. Evidences of his work are apparent every day. These evidences may be seen in almost every hospital in the land and in the undertakers' parlors.

What is to be done to curb his ruthless ways? Shall he be allowed to continue with his slaughter or shall he be kept off the roads?

A driver's license law should be passed by the next session of the legislature and the license revoked for a length of time depending upon the gravity of the offense upon conviction of reckless driving. This plan will keep him off the road for a time. It is evident that such a law will have a salutary effect. To deprive a man of the right to drive his car will be more effective than a fine.—Nebraska Highways.

He calls his dog Jason because he is always hunting for fleece.—Stanford Chaparral.

Study Transportation Needs

Prepared by E. H. POLLEY, Field Representative, Nebraska

THE comment most often heard when anyone talks of road building is that taxes are high enough now. Perhaps they are, but when we realize taxes are simply a part of the price we pay for civilization we are all proud of the returns from our investment.

The gas tax should not be thought of in the same way most taxes are considered. It is the one tax from which immediate results are obtained and should be considered as a part of one's automobile service. It should be classed with new tires, spark plugs, oil and other service. It is the one part of maintenance that brings continuing service and reduces other repair bills.

Each year the public anxiously await announcements of new model cars. Millions of dollars are spent annually educating people as to new motors, new colors, new springs, new body lines and many other new changes that make automobiles more attractive and alluring. Most drivers study these changes and thousands sell their cars and invest hundreds of thousands in new automobiles.

What would happen if as much money was spent advertising the road bed over which this vast fleet of cars is operated as is spent advertising the rolling stock?

You should know your car and you should know the automobile market but you should not let your transportation education stop with the study of new models.

If the drivers of Nebraska spent one-tenth the time they spend arguing over the merits of individual cars, in discussing the building of highways, their transportation cost would be materially reduced.

There is at least \$50 spent in advertising every car purchased. That \$50 is paid by the owner and there are 380,000 in Nebraska.

Five dollars spent in advertising or promoting highways would give this state a system of roads

that would be on a par with the 1929 models. It would save each owner 2½ cents per mile.

The three hundred and eighty thousand cars in Nebraska that are driven an average of 6,000 miles per year would reduce their service bills \$5,700,000.

Add to that the pleasure and convenience of knowing you can go when and where you want to and try to figure out what good roads are worth to you.

Who ever heard of a railway company buying a lot of fine engines, Pullmans and other equipment, then sending men out to look for a place to put a track.

What would you think of a railroad which, after they had located a place to put a track, went to market and purchased the cheapest track they could buy regardless of the number or size of trains they were to run?

What would you think of the Union Pacific if they attempted to run the California Limited over tracks put down along the Platte river sixty-two years ago?

Motor transportation has developed and grown as much in the last twelve years as the Union Pacific did in fifty.

Are you willing to operate 1929 motor traffic on 1916 roads?

You are not, but most people are willing to sit idly by and wonder when roads to their town and farms will be built.

Good roads don't grow. They are the result of planning and hard labor. There is plenty of work for all. Realize the importance of organized effort and do your part.

Laws are passed because people want certain results.

Your Senators and Representatives are making laws for you. It is up to each citizen to see that his representative knows what is wanted and needed. You cannot inform him until after you have posted yourself.—Nebraska Highways.

PENNSYLVANIA CHANGES WORKING SYSTEM IN 24 HOURS

Complete changeover from the state numbering system to the state and Federal system of marking highways through the erection of some 70,000 new metal markers, all within the space of 24 to 36 hours, is the latest task essayed by the Pennsylvania Department of Highways.

Abandoning the old system of painting the numbers on poles, the department has adopted a standard metal marker which is erected on a metal post in a position at the side of the road so that automobile headlights will light it. Federal markers are the distinctive U. S. shield and the route number is imposed in the metal.

The eight divisions of the department prepared for the changeover by filing requisitions for the required number of signs. Through their various sub-divisions each of the eight divisions had its signs shipped and "spotted" at working bases in readiness to begin erections at the drop of a hat. All units are being worked simultaneously so that confusion to motorists will be virtually eliminated.—Highway Engineer and Contractor.

THE MOST POPULAR SPORT

Touring by automobile is proving to be the most popular sport for 1928, according to motor world experts. The real touring season has just begun, but the justification of an attempt by these experts to forecast is justified in the way the trend points within the last two months.

One reason for this is that the latest creations of the automobile world are built with an eye for pleasure. Another reason is that after a period of stark utility the idea of automobile recreation is again being sold to the motoring public.

It is predicted by 35 heads of as many different automobile concerns that the families without cars will greatly decrease this year and those who already have cars and are sold on the comforts of motoring will find happiness in the purchase of newer and better ones.

As a nerve tonic in enabling one to get away from every-day strain there is none better than the open road, a dependable car and congenial surroundings.—Continental Red Seal.

PRESIDENT'S STAY PULLED 25,000 TOURISTS TO NORTH COUNTRY

President Coolidge and the Brule river brought more than 25,000 tourists to the Superior district in the course of the summer season which now is closing, according to figures compiled by the Superior Public Affairs committee and the Wisconsin highway commission.

When announcement was made that the president would summer at Cedar Island lodge, predictions of thousands of persons coming to Superior and vicinity were made. While this was not borne out, officials say that 10,000 more persons were near here this year than in 1927.

With the presidential party in Washington, the interest has not flickered, for since Sept. 1, 125 automobiles with an average of six persons to a car have used the municipal tourist camp.

Persons getting information from the affairs booth registered, and officials say that there were 1,147 signers. The average party was four persons. The committee gave 3,000 maps to the information booth at Brule and dispensed to tourists 6,000 maps of Wisconsin, 4,000 of Minnesota, 1,000 Upper Michigan maps, 4,000 Brule trip maps and other tourist literature.

Superior Merchants Benefit

From inquiries received at the information booths, officials estimate that 26,250 tourists have been through the district.

The average of 75 cents a person was expended in Superior, it is said, meaning that Superior merchants are \$19,000 richer through the tourist influx.—Badger Highways.

ONE MORE STATE ADOPTS GAS TAX

A two-cent gasoline tax will go into effect in Massachusetts January 1. This leaves New York the only state in which a gasoline tax has never been adopted. Illinois adopted a two-cent tax in 1927 but it was held unconstitutional. This leaves the status of the gas tax as follows:

5 cents	Six states
4 cents	Twelve states
3½ cents	One state
3 cents	Fourteen states
2 cents	Thirteen states
No tax	Two states

Four provinces in Canada have a 5-cent gas tax, namely, British Columbia, Nova Scotia, Prince Edward Island and Quebec. Five provinces, Alberta, Manitoba, New Brunswick, Ontario and Saskatchewan, have a 3-cent gas tax.

The average rate in the States is now 3.11 cents and in the Provinces 3.88 cents a gallon.—Highway Engineer and Contractor.

Haunted Headpiece

The village choirboys, relates the London Chronicle, had decided to form a cricket team and appointed their junior member honorary secretary. In due course the youngster appealed to the curate for support. This is how the letter ended: "And we should be very pleased, sir, if you would allow us the use of the bats which the choirmen say you have in the belfry."—Boston Transcript.

WHAT OTHER STATES ARE DOING

(From The Highway Magazine)

MASSACHUSETTS—The Petersburg Mountain Highway, recently finished between Williamstown, Mass., and Petersburg, N. Y., links two states through a region of great scenic beauty. The road climbs 1,300 feet in 4.3 miles, passing Mt. Greylock, the highest mountain in the state.

PENNSYLVANIA—More than a thousand miles of old stone roads have been reconditioned at moderate cost by applying two inches of new stone, rolling, adding tar, and then blading and rolling while tar is stiffening.

NEW YORK—In the Adirondack region traffic is largely for pleasure and good stone is plentiful. These two factors combine to make bituminous macadam the most practicable type of road surface, a large mileage of which is being added each year.

WASHINGTON, D. C.—The streets and boulevards of the National Capital are lined with 105,123 well kept shade trees, a census shows. A recent appropriation will add 3,500 more.

OHIO—A new law provides that all traffic lights erected along state highways by cities and villages must receive the O. K. of the state highway department before being operated. This law covers lights now in service as well as future installations.

MICHIGAN—Electric lights now aid night motorists on 375 miles of highways outside of cities and towns, it is reported.

ILLINOIS—Among the state paving and bridge contracts let during June and July are fifteen at more than \$150,000 each, the largest being for \$344,000.

CLEVELAND—A regional highway plan anticipating a traffic growth of 73 percent in ten years has been prepared. It includes 125 miles of new and 468 miles of reconstructed routes, 55 grade eliminations and 18 bridge projects. The cost is estimated at \$63,000,000.

NEBRASKA has built 3,246 miles of gravel highways in the past four years. Their annual maintenance cost has averaged \$405 per mile. On twenty-two of the most heavily traveled routes this figure is \$570, not including major repairs and resurfacing. Cost of resurfacing has averaged \$873 per mile.

MISSISSIPPI—Forrest County is beginning a two-million-dollar program which will give Hattiesburg and vicinity 52 miles of new improved roads.

UTAH—The longest highway tunnel in the world—more than a mile—is being constructed as part of the new Zion-Mt. Carmel Highway in southern Utah.

BRITISH COLUMBIA—Caribou Road, leading from Vancouver 432 miles north to Prince George, has been rebuilt to modern standards for a distance of 100 miles. The cost, which included tunnels, bridges, high retaining walls and heavy rock excavation, exceeded \$2,500,000.

EASY RULE TELLS HOW TO KEEP WITHIN STATE SPEED LIMITS

"What is the speed limit in Georgia?"

That is a common question, especially at this time of the year when tourists from other states are most numerous and when many of the home folks are taking their annual vacation trips.

To give a complete answer and quote the sections of the law giving the "reasonable" speeds at various places would take a half column in this paper, and after you get all through you have to explain that these are not maximum speeds, but simply that going at higher speeds is *prima facie* evidence that you have been driving at a greater speed than is reasonable and proper.

To avoid confusion it is much simpler to remember this rule:

DRIVE SLOW ENOUGH SO YOU CAN STOP IN THE CLEAR SPACE AHEAD.

If you stick to that rule you will be safe from arrest except in a very few communities where they make arrests for technical offenses instead of careless driving. Fortunately the number of such communities in Georgia is growing smaller and smaller.

But more important than helping you to avoid arrest, this rule if generally observed would cut down accidents at least ninety per cent.

It is well to study the state law relative to speed, as well as all other parts of the traffic act. Anyone can obtain a copy by writing to the State Highway Department Traffic Engineer, East Point, Ga. But since few can remember the whole traffic law, it is worth while to repeat this rule:

ALWAYS DRIVE SO YOU CAN STOP IN THE CLEAR SPACE AHEAD.—Georgia Highways.

A HIGHWAY HAZARD SURVEY

The study of road conditions in relation to highway accidents is being taken up by the Connecticut highway department. Already having in its allied department of motor vehicles one of the best organizations of any state for counting, recording and analyzing motor-vehicle accidents, the state is stepping ahead with a plan to coordinate these records with road conditions and ascertain if possible what relations exist between the highway and the hazards that have been shown to exist. Briefly stated, all points on the state highway system outside of cities where two or more accidents occurred in 1927 will be surveyed and tested out to determine whether road conditions contributed to the mishaps and how they contributed, and what should be done to eliminate the hazard. This action is distinctly inspiring. It has been so widely and persistently advertised that statistics establish drivers' carelessness as the major cause of motor-vehicle mishaps that road engineers have been getting a little smug in their belief that they have no problem to solve in creating greater highway safety. Evidently the Connecticut highway commissioner does not intend to be charged with this sort of narrow complacency, perhaps because he was previously motor-vehicle commissioner himself and has a perspective of road and driving hazards removed from direct participation in construction and maintenance. We believe that Connecticut is by means of this survey taking a forward step in high-

way safety, and furthermore we prophesy that the survey will disclose many more accident-provoking conditions on its public roads than anyone could have anticipated. And Connecticut has better roads and better road maintenance than most states and paid greater attention to highway safety than any but a few other states.—Editorial in Engineering News-Record, August 2, 1928.

PUBLIC TAKES THE LEAD

A few years ago road builders were urging the public to permit the building of better roadways; today the public is urging the road builders to provide adequate highways. The market has reversed; the public is bullying the market and road builders hardly know which way to turn.

Roadbuilding has progressed from the township system to the county system to the state system to the federal system and soon we may have the high-speed system for special service.

Governmental organization always lags behind the demand and perhaps rightly so. It was with infinite labor that counties obtained control of roads that townships could not maintain properly and similar opposition was shown to the development of state and federal roads.

Only a tremendous change in traffic conditions and the travel habits of people could have wrought such a change in governmental authority.

Now we have a composite system of governmental control of roads that has not provided enough roads to accommodate the traffic.

The public wants more and better roads and never has such an opportunity existed for road builders to perform a public service than exists at the present time.

Opposition to any sane plan of providing such roads is inopportune and should be discouraged, provided the road users pay for the roads in proportion to the use. Both the gasoline tax and toll roads meet this requirement.—Highway Engineer and Contractor.

WE CAN'T KEEP UP

No matter how far ahead we may be planning our highways, no matter what our improvement of traffic facilities may be, we just can't keep up with the fast-speeding automobile.

There's the new Holland vehicular tunnel, for example. This pair of pipes under the Hudson river at New York has been devouring and ejecting automobiles for several months. During that period nearly 2,500,000 motor vehicles of all types have passed through it.

Of course, the tubes can accommodate many more cars at a steady stream of about 25 miles an hour. But even new as they are, they show signs of clogging up when the big rush comes in summer. More tunnels are needed already. The new is aging fast.

The same is true of highways. Today we plan 100-foot highways; tomorrow they will have to be extended to 200 feet; and before long we shall have to build double-deck roads to accommodate slow and fast traffic.

The road we build today with prospect of accom-

modating for the next decade, may be overburdened in two years instead.

The automobile registration is growing faster than our highways and only radical and far-sighted planning can succeed in catching up with this growth.—Arizona Highways.

Walled In

The night was dark, and the hour late, when the lone merryman advanced unsteadily toward the concrete lamp-post. Gingerly touching the rough surface, he felt about until assured of a solid support and then leaned back, resting. After a few minutes, deciding to again pursue his alcoholic path, he turned and felt carefully about the surface of the post. Round and round he walked, never taking his hands off the concrete. Amazement gave way to despair and at last, sinking down on the pavement, he gasped:

"My G—d, I'm walled in!"

Wrong Kind of Spot

High Hat: "What happened to that valet of yours?"

Hye Hattie: "I fired him for removing a spot from one of my suits."

"But isn't he supposed to do that?"

"Yes, but this was a ten spot."

Joke on the Mule

A negro mule skinner was harnessing his team when a bystander asked: "Sam, does that mule ever kick you?"

"No, suh," he replied: "But he sometimes kicks where I's jest been."

The Scotch Joke

She: "I hear the Scotchmen are trying to put an end to all the jokes about them."

He: "And why?"

She: "Every one of them is at a Scotchman's expense."

Trouble in Prospect

She: "When we are married I'll share all your troubles and sorrows."

He: "But I have none."

She: "I said when we are married."

Tough Luck

Customs Official at Canadian Border (producing bottle): "I thought you said there was nothing in your bag but wearing apparel—what's this?"

The Mrs.: "Oh, er—that's my husband's night-cap."

"Passenger Plane Has Dining-Room," says a headline. And now it is up to Miss Emily Post to suggest something salty but polite for the passenger to say when the ship goes into a tail-spin during dinner and spills the soup in his lap.—Macon Telegraph.

Enough to Displisa

There was a young lady of Pisa,
Whose lover attempted to squisa,

But she lost all her charm,
When he said with alarm,

"My goodness, how knobby your knisa!"

—London Bystander.

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Jacksonville

Homeric Scrap

Down in Arkansas a man was tried for assault and battery with intent to kill. The State produced as evidence the weapons used, a rail, a gun, saw, and rifle. The defendant's counsel exhibited as the other man's weapons a scythe blade, pitchfork, pistol, dog, razor, and hoe. After being out several hours the jury gave this verdict: "We, the jury, would have given a dollar to see the fight."—Charleston News and Courier.

He Passed

Even the grave and dignified British Civil Service Commissioners could not resist being amused at an answer given at a recent examination. The question was:

"Give for any one year the number of bales of cotton exported from the United States."

The applicant wrote: "1491. None."

Must Have Been Potent

"Did you get home all right last night, sir?" asked the street car conductor.

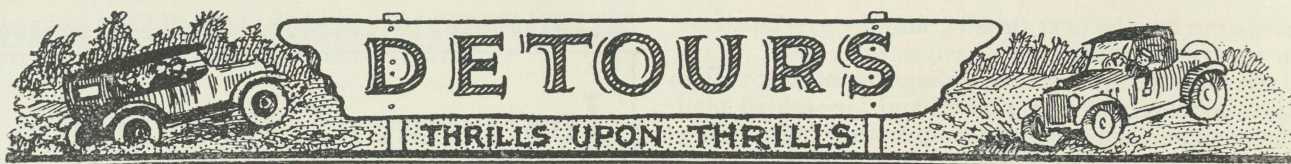
"Of course—why not?" came back the passenger.

"Well, when you got up to give your seat to the lady last night, you were the only two people in the car."

Poisoned Dagger

"No doubt you will allow me to take my laundry with me," said the haughty lodger who had been rather delinquent in his payments.

"Certainly," replied the landlady. "Your other collar is down-stairs!"—Christian Science Monitor.



He Got the Job

"Darling, I lay my fortune at your feet."

"But you have no fortune."

"No, but what I have will look immense beside such dainty feet."—Carnegie Puppet.

When Cupid hits the mark he usually Mrs. it.—Penn. Punch Bowl.

He: "You ought to see the altar in our new church."

She: "Well, lead me to it."—Texas Ranger.

Sister's Bob?

Visitor (speaking of little boy)—"He has his mother's eyes."

Mother—"And his father's mouth."

Child—"And his brother's trousers."—Tit-Bits.

"They tell me that the people in Chicago don't bathe but once a month."

"The dirty crooks."—Carolina Buccaneer.

"Jones has eleven children."

"He's gone stork mad, hasn't he?"—Aggievator.

"Got a sweetheart?"

"I did have."

"Where is she now?"

"I put her back in circulation."—Wash. & Lee Mink.

"Better stay away from that gas station over by the hangar. You're likely to get consumption."

"How?"

"Say, didn't you ever hear about gasoline consumption?"—College Humor.

Inquisitive Old Lady: "Where did those large rocks come from?"

Tired Guide: "The glaciers brought them down."

"But where are the glaciers?"

"They have gone back after more rocks."—Aggievator.

"I hear as how Snick has took a job."

"Ain't it a fright what some folks will do fer money?"—Goblin.

Hell hath no fury like a man misquoted.—Grinnell Malteaser.

The Lady: "I play the piano just to kill time."

The Gent: "You certainly have a good weapon."—Texas Ranger.

She calls her friend Pilgrim because he makes so much progress.—Blue Moon.

Foreman: "And in that large room in the rear we have several dyeing vats."

Lady Visitor: "Oh, isn't that a shame. And can't you do thing for them?"—Lehigh Burr.

A pessimist is a fellow who lives with an optimist.—Columbia Jester.

Miss Simp: "I hear you are a pillar of the church."

Sunday Golfer: "No, I'm just a flying buttress. I support it from the outside."—Stanford Chap-paral.

Fire Inspector: "But where are your fire escapes?"

Hotel Manager: "Don't you know this is a leap year?"—Westminstrel.

She: "Out of sight, out of mind."

He: "Yes, and out of mind, out of luck."—Cornell Widow.

Girl: "Do you think you can cure my eczema in time for the dance on Friday?"

Doctor: Well, I hate to make any rash promises."—Wisconsin Octopus.

"What is love?"

"Well, if you marry the girl—that's love."—Pup.

Hocus—"Where do these scenario writers get their ideas?"

Pocus: "What ideas?"—College Humor.

"How big is a tug boat?"

"What kind of a tug boat?"

"Oh, a big one."

"How big?"—Annapolis Log.

Tough Guy: "For two cents I'd knock your block off."

Wise Guy: "Get away from me, you dirty professional."—U. of S. Cal. Wampus.

"And why is he so snobbish?"

"Why, he was the first man in town to be run over by one of the new Fords."—V. M. I. Sniper.

London Curio Dealer: "Yes, sir, this is the very handkerchief used by the father of William Penn."

Tourist: "Hm, the original pen wiper."—Penn. Punch Bowl.

There was an old colored woman who named her triplets Surely, Goodness and Mercy so they would follow her all the days of her life.—Amherst Lord Jeff.

Hotel Manager: "Aren't you worrying about the ten dollars you owe us?"

College Student: "Heck no! What's the use of both of us worrying about it?"—Bucknell Belle Hop.

"Why did the waiter bring you two eggs this morning when you ordered only one?"

"He said he didn't have the heart to separate them after all these years."—C. C. N. Y. Mercury.



Orange County, Fla., is building 350 miles of this one type of *"non-skid"* paving

DURING December the last link of the Scenic Highway—150 miles from Mt. Dora to Sebring—will be opened. This "non-skid" Bituminous Slag Surfaced highway passes through the beautiful citrus fruit belt of Florida that produces 80% of the citrus grown in the State—runs over hills, around lakes and through orange groves its entire length—and carries heavy traffic between Mt. Dora, Avalon Groves, Winter Garden, Davenport, Haines City, Lake Wales, Avon Park and Sebring.

Photo above shows section of Scenic Highway passing through beautiful Avalon Groves in Orange County, and Major Chas A. Browne, Highway Engineer, under whose direction 185 miles of "non-skid" bituminous

"ENSLEY" & "ALA CITY"
BASIC SLAG
CRUSHED & SCREENED

surfaced roads have been completed since 1926. A SEVEN-MILLION dollar bond issue calls for a total of 350 miles of this type of paving—6-in. compacted lime rock base surfaced with Asphalt and 30 lbs. of No. 6 and No. 46 "Ensley Basic Slag" per sq. yd. Finley Method Co. (Jacksonville) have laid all of the surface treatment.

The experience of Orange County is typical. The first bond issue (\$1,000,000) voted some 15 years ago was for brick, 9 ft. wide, laid on sand. The second issue, in 1922, covered only 4 miles of brick, the remainder being 35 miles of Asphaltic Concrete, 8 miles Sheet Asphalt (slag binder) and 11 miles of Slag Surface Treatment, all laid on lime rock base. The \$7,000,000, bond issue passed in 1926, will be spent entirely for Slag Surface Treatment highways, 18 ft. wide. Blast Furnace Slag has been used in over 3,280 miles of Florida's wonderful highway system.

BIRMINGHAM SLAG CO.

Slag Headquarters for the South
ATLANTA BIRMINGHAM JACKSONVILLE
THOMASVILLE MONTGOMERY OCALA FLA

Status of Construction

THROUGH SEPTEMBER 30th, 1928.

Proj. No.	Contractor	Road No.	County	Total Length Miles	Clearing Miles	Grading Miles	Base Miles	Surface Miles	Type	Per Cent Complete
53-C	Manly Const. Co.	2	Lake	2.85			0.00	0.00	Bit. Conc.	9.00
55	W. J. Bryson Pav. Co.	14	Alachua	16.77	16.77	15.93			Graded	96.00
56	Nelson Bros.	10	Leon	17.98				0.00	Concrete	0.00
61-A	M. C. Winterburn, Inc.	1	Gadsden	10.00				10.00	Concrete	99.00
61-C	Morgan-Hill Pav. Co.	1	Gadsden	9.77				9.77	Concrete	95.00
62-A	A. D. Weeks	24	Osceola	12.52	11.27	11.27			Graded	80.00
62-C	Everglades Const. Co.	24	Osceola	11.83	11.83	7.22			Graded	74.00
62-D	A. D. Weeks	24	Osceola	12.62	12.62	9.09			Graded	83.00
500-B	State Convict Forces	20	Bay	12.76	10.12	10.12			Graded	70.97
535	L. B. McLeod Const. Co.	5-A	Lafayette	13.20	13.20	13.20			Graded	100.00
624	L. B. McLeod Const. Co.	50	Hamilton	6.23	6.23	6.23			Graded	100.00
644-A	State Convict Forces	10	Wakulla	8.50			8.50	3.50	S. T. R. B.	78.00
669-C	R. C. Huffman Const. Co.	27	Dade	12.00	12.00	12.00	12.00	0.00	S. T. R. B.	98.00
669-D	R. C. Huffman Const. Co.	27	Dade	12.31	12.31	12.31	12.31	0.00	S. T. R. B.	98.00
669-V	H. E. Wolfe	27	Collier	19.72	19.72	19.72	19.72		S. T. R. B.	90.00
677-D	Duval Engr. & Contr. Co.	13	Levy	8.91			8.91	6.24	S. T. R. B.	92.00
678	State Convict Forces	10	Bay	8.73	8.73	8.73			Graded	100.00
683-A	Robert G. Lassiter Co.	4	Palm Beach	8.04	8.04	8.04		7.63	Concrete	95.00
685	Pararo Const. Co. and State Forces	10	Franklin	14.43			0.00	0.00	S. T. R. B.	0.00
687-B	Wm. P. McDonald Const. Co.	2	Lake	15.22			2.28	0.00	S. T. R. B.	12.10
688	State Convict Forces	10	Bay	9.32	3.92	3.00			Graded	15.00
706-B	Curry & Turner	28	Putnam	14.91	14.91	14.91			Graded	100.00
707	Leon County Forces	43	Leon	5.31	3.00	1.50			Graded	15.00
709	C. G. Kershaw Const. Co.	39	Holmes	9.09	9.09	9.09			Graded	100.00
719	Broadbent Const. Co.	5-A	Suwannee	8.57			0.00	0.00	S. T. R. B.	0.00
720	Hardee-Fisher Co., Inc.	11	Jefferson	9.64	9.64	9.35			Graded	90.00
722	R. J. Carroll	48	Jefferson	8.83	8.83	5.06			Graded	69.00
724	Leon County Forces	66	Leon	11.10	10.32	8.99			Graded	64.00
726	State Convict Forces	19	Dixie	12.57	7.00	6.50			Graded	40.00
728	State Convict Forces	10	Leon	11.65	11.18	11.18			Graded	96.70
732	Gilbert & Hadsock	17	Polk	8.94	8.94	8.94			Graded	100.00
736	C. G. Kershaw Const. Co.	39	Holmes	8.58	8.58	6.86			Graded	80.00
740	Baker & Lewis and State Forces	10	Gulf	9.36			5.30	2.41	S. T. R. B.	48.00
743	State Convict Forces	10	Bay	18.25	18.25	18.25			Graded	100.00
744	State Convict Forces	19	Madison	5.79	5.67	5.38			Graded	92.00
745	Convicts & Taylor Co.	19	Taylor	15.95	14.83	13.89			Graded	83.00
748	State Convict Forces	35	Madison	6.22	6.16	6.16			Graded	98.30
749	State Convict Forces	14	Gilchrist	7.81	7.42	4.06			Graded	57.00
750	State Convict Forces	14	Gilchrist	12.97	7.52	2.59			Graded	33.00
755	B. Booth	17	Polk	11.22	11.22	11.22			Graded	100.00
757	Little & Lee	2	Polk	10.26	10.26	10.26			Graded	100.00
758	Little & Lee	2	Polk	8.34	8.34	8.34			Graded	100.00
764	Duval Engr. & Contr. Co.	50	Suwannee	12.00			1.20	0.00	S. T. R. B.	7.40
780	C. F. Walker	29	Okeechobee	11.00	11.00	9.90			Graded	93.00
781	C. F. Walker	29	Okeechobee	11.00	11.00	9.90			Graded	80.00
782	C. F. Walker	29	Okeechobee	6.62	6.49	6.49			Graded	84.00
798	State Convict Forces	13	Nassau	15.03	6.50	1.25			Graded	10.00
802-A	C. C. Hayes	10	Okaloosa	8.68	5.73	.52			Graded	8.32
802-C	Curry & Turner	10	Okaloosa	10.24	0.00	0.00			Graded	0.00
803	Collins Const. Co.	10	Okaloosa	11.13	3.34	0.00			Graded	3.00
804	C. A. Steed & Sons, Inc.	67	Glades	18.56	18.56	15.01	6.50	0.00	S. T. R. B.	55.00
807-A	R. C. Huffman Const. Co.	25	Palm Beach	10.82	10.82	8.65	6.41	0.00	S. T. R. B.	64.00
807-C	R. C. Huffman Const. Co.	25	Palm Beach	6.14	3.45	2.40	1.00	0.00	S. T. R. B.	25.00
815	Silas Gibson	54	Okaloosa	13.58	12.90	8.28			Graded	65.00
819	W. J. Bryson Pav. Co.	54	Okaloosa	4.44	4.44	4.39			Graded	99.00
823	W. J. Bryson Pav. Co.	41	Okaloosa	9.18	8.72	6.70			Graded	82.00
824	W. J. Bryson Pav. Co.	41	Okaloosa	9.82	9.33	6.38			Graded	70.80
827	S. G. Collins		Escambia	8.12	8.10	6.08			Graded	75.00
Total complete September 30th, 1928				2,763.68	2,702.18	1,246.00	1,955.72			
Complete month of September				15.89	22.27	4.07	9.00			
Total complete August 31st, 1928				2,747.79	2,679.91	1,241.93	1,946.72			

TOTAL MILEAGE COMPLETE

	Concrete	Brick	B. C.	S. A.	B. M.	Asph. Block	S.T.R.B	S.T.S.C.	S. C.	Marl	Total
Complete to Aug. 31, 1928	270.39	17.13	36.46	112.94	109.44	23.20	953.20	174.09	257.04	27.58	1,981.47
Complete month of Sept.	40				.26		10.02				10.68
Complete to Sept. 30, 1928	270.79	17.13	36.46	112.94	109.70	23.20	963.22	174.09	257.04	27.58	1,992.15

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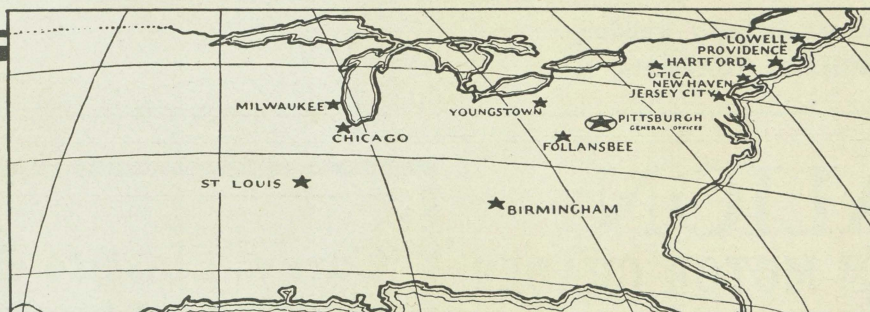
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